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Chinese Jades

in the Royal Ontario Museum

17103

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Chronology*

Late Neolithic	?3000-1500 B.C.
Shang (or Yin)	?1523-1028 B.C.
Late Shang (Anyang)	?1300-1028 B.C.
Chou	?1027-256 B.C.
Western Chou	?1027-771 B.C.
Eastern Chou	770-256 B.C.
a. Ch'un-ch'iu (Early Eastern Chou)	770-481 B.C.
b. Chan-kuo or Warring States (Late Eastern Chou)	480-222 B.C.
Ch'in	221-207 B.C.
Han	206 B.C.–A.D. 220
Western Han	206 B.C.–A.D. 8
Wang Mang (Hsin) Interregnum	9-24
Eastern Han	25-220
Six Dynasties Period (Northern & Southern Dynasties)	220-589
Sui	589-618
T'ang	618-906
Five Dynasties Period	906-960
Sung Dynasty and Period	960-1279
Northern Sung	960-1126
Southern Sung	1127-1279
Liao (Khitan Tartars)	907-1124
Chin (Jurchen Tartars)	1115-1234
Yüan (Mongol)	1280-1368
Ming	1368-1644
Ch'ing (Manchu)	1644-1911
Modern	1912-

*For the period before 841 B.C. when the records agree, the reconstructed "Bamboo Annals" dating worked out by Bernhard Karlgren and Ch'ên Mêng-chia is used. The reader may encounter variant terminology—such tripartite schemes for Shang and Chou art as Yetts' First Phase, Second Phase, Third Phase, or Karlgren's Shang to Early Western Chou, Middle Chou (c. 900-600 B.C.) and "Huai." I have not hesitated to use "Yin-Chou," "Middle Chou," "Late Eastern Chou–Han" and even "?" for pieces of uncertain date which are nonetheless important.

Chinese Jades in the Royal Ontario Museum
Preface and Acknowledgments

The present assemblage of thoughts and images grew out of my cataloguing of over six hundred pieces of Chinese jade from the Royal Ontario Museum collection. Publication has been aimed to coincide with the opening in the Chinese Galleries of the Museum of an Exhibition of Jades in December, 1971 – the first of a series from the Far Eastern Collections planned by Dr. Hsio-yen Shih, Curator of the Department. Since this will cover a wide range of time and types, however, it is hoped that the Catalogue will serve as an introduction to the study of Chinese jade in all of its forms.

The majority of the all-important photographs are by Arthur Williams of the ROM Department of Photography. I am indebted to Mino Yutaka for pointing out comparative material which I might otherwise have missed, to Hsü Chin-hsiung for advice on seals, to Patricia Wilson for the rubbings for pages 5, 8 and 23, to Linda Dove for typing almost unreadable manuscript pages, to Mrs. George Harris for her care in reading over a good number of my catalogue entries, and to Janki Mehta and Valerie Mounsteven for help with numbering the jades. On the Sciences side of the Museum, I wish to thank Dr. J. Mandarino, Dr. R. Gait, Mr. A. Hurtado and Mrs. Cynthia Peat of Mineralogy, Mrs. Jean Charing of Geology, and Dr. G. Wiggins of Entomology for testing and technical information freely given. Professor V. T. Yang of the East Asian Studies Department of the University of Toronto kindly brushed for me the character for jade. My thanks are due again to John Hughes of ROM Display General, Mrs. Olive Koyama of Information Services for the care and editing of a manuscript, and Mr. Scott Thornley for the design of the book. First and last I am grateful to Hsio-yen Shih for encouraging me to take on this work.

Toronto
June 1971

Rubbing of ring with ornate flange. (page 72)

Introduction
History and Scope of the Collection

The first pieces of Chinese jade came into the Royal Ontario Museum about 1910 through the generosity of Mrs. H. D. Warren and Sir Robert Mond. The latest accessions were from the I. Ogden Woodruff Bequest of 1969. Like the Chinese collections in general, however, the majority of Chinese jades in the East Asian collections fall into three groups: (1) The George Crofts Collection (mainly later jades with some earlier ones) shipped from China between 1918 and 1926 by the Tientsin fur merchant, collector and connoisseur of that name; (2) The Bishop White Collection (mainly archaic jades with some later ones) acquired for the Museum between 1924 and 1934 by William Charles White, Canada's first Anglican Bishop of Honan Province, first Keeper of the East Asiatic Collections of the Royal Ontario Museum of Archaeology and first Director of the School of Chinese Studies at the University of Toronto; and (3) The Dr. James M. Menzies Collection (again, mainly early and especially Shang jades) gathered by the well-known missionary and scholar for some time resident at Anyang near the site of the last capital of the Shang Dynasty. As former Director Charles Trick Currelly put it "Crofts had got very little that was B.C. and White very little that was A.D., so that now both periods are well represented in the Museum."[1] The Menzies Collection is important both for whole pieces, mostly of Late Shang (?1300-1028 B.C.), and for numerous fragments of value for study.

The ROM jades number over 1000 pieces. More than half are of aesthetic or historical interest. The selection of about 200 examples for publication was based on both quality and history, with a bias toward the historical, for many large and beautiful Ch'ing jades have been left out in favour of others which seem to fill gaps in our knowledge. Best known in Toronto are the Eastern Chou jades of the 5th to 3rd centuries B.C. from those collected and annotated by Bishop White in his *Tombs of Old Loyang* (Shanghai, 1934). The others are largely unpublished to date, with the exception of an interesting group of archaic and archaistic ritual jades purchased by White from the collection of the great early jade scholar, Wu Ta-ch'êng. Where provenance data exists in our record it is reported. It might also be said that the earlier ROM jades are among the world's "dirtiest". With the exception of pieces cleaned in the process of mending (when it was sometimes found that the "traces of earth and red pigment" covered previous repairs) and an occasional rub of one side for photography, whatever incrustations came on the archaic or "burial" pieces remain, for what they are worth.

Dragon Pendant (931.13.16). L. 5" (12.7 cm.). Eastern Chou, 5th century B.C.
Published: White, *Tombs of Old Loyang*, Pl. CXXVI: 313b; Trubner, *Handbook of the Far Eastern Collection of the Royal Ontario Museum*, p. 31 no. 28

Faintly translucent, yellowish-green and brown jade, one face almost completely brown. Traces of calcification. Low polish. Ornamental rather than organic silhouette. Hump-backed, régardant dragon has three fluted appendages not clearly identifiable as to function. Relief borders; sunken fields of body carved on both surfaces with spiral and other forms in strong relief. Fine diagonal striations at jaws. Neat perforation centred (from standpoint of balance) in dragon's hump. Centrepiece of girdle pendant? Longer green jade plaque pendant from the Sonnenschein collection in Chicago illustrated in Salmony, 1938, Pl. XLII; 4 and dated by him "Late Eastern Chou."

Problems in Chinese Jade
General

The study of Chinese jade is one of 4000-year-long evolutionary cycles of themes and variations. Due to the length of Chinese history and the inventiveness of the Chinese people within limits they set for themselves, the number of themes and especially of variations is great. The relative isolation of China as the largely self-centred pivot of Far Eastern civilization, and the tenacity of form in what was in large degree a religious art, render distinctions as to the time and place of manufacture of a particular jade extraordinarily subtle. The difficulty of the Chinese written language and, again, its great age and several transformations has rendered a voluminous literature laced with references to jade almost as opaque to Chinese as to foreign scholars. Thus many important forms of jade are still only uncertainly named, much less understood. Finally, archaeology is of less help in the jade field than with pottery, for example. The mineral was enduring, portable and precious. It is more likely than any other substance to be found far in time and space from its point of manufacture, not to speak of its natural origin. Yet only when we know when and where a jade was "made" can we talk about symbolism or meaning or ritual function. Archetypal forms like the *pi* disk, so-called "Symbol of Heaven" (like the cross, the mother-and-child, etc.) precede and outlive particular names, roles and meanings, return or keep though they may to the more powerful ones.

Yet the writings are important both for jade and Chinese history, the two being intimately linked. Ritual jades underlay, symbolized and buttressed the Confucian state and system, while the qualities of the stone became metaphors for those of the Confucian ideal of the *chün-tzü*, noble or superior man. Its place of origin, on the other hand, and the magical properties attributed to it were linked with the more westerly of Taoist paradise locations such as the K'un-lun Mountains, and with Taoist alchemists' seeking Immortality. In the *Tan ching yao chüeh* ("Essential formulas for oral transmission from the alchemical classics") attributed to the 7th century physician Sun Ssü-mo one finds the Formula for Grand Unity Jade Powder Elixir, for example, or a Formula for Making White Jade.[2] Not only was jade divine, with spiritual, socio-political and magical properties, but throughout there was its appeal to the senses, the softness of its range of colours and its dim translucence for the eye, its cool smoothness to the touch, the sound of it in chimes for the ear. From the Chou Dynasty onward, *yü po*, jade and silk, stood in preferred contrast to *hsing jung*, weapons of war, as the means to the end.[3] The importance of understanding jade in China for all these reasons makes it worthwhile to tackle the difficulties. Even in a beginning study, questions can be asked and wholly or partially answered.

So preeminent were the Chinese in the working of jade and so closely are "China" and "Jade" associated in people's minds that foreign jades are sometimes assumed to be Chinese. Conversely, jades in foreign styles may have been worked by Chinese craftsmen to foreign order and taste.

A simple, undecorated form such as the neolithic axe (page 41) tells little of its maker. All there is to go on in such cases is the provenance report, if any, or close similarities to jade axes excavated in China. But even a jade excavated under controlled conditions from a "closed find" or an undisturbed burial (and there are few of these in Western collections) need not be Chinese, any more than the Sassanian coins excavated in China are Chinese. A piece might be imported, taken as booty, as tribute or in trade and only buried in China. Axes of jade are known from Europe, Central Asia and Central America. Even the archetypally Chinese *pi* and *tsung* forms — whatever their names elsewhere or their origins — are encountered in Iranian and perhaps other collections.[4] An undecorated jade — axe, plaque, etc. — can only be placed *provisionally*. Many Dynastic (Shang and later) jades are identifiable to a student of Chinese art on the basis of style alone — a certain vitality of silhouette even in a realistically done small hare, for example, or a Chinese "geometry," an ornamentalism in others. In Shang and Chou China, jade decoration often followed that of bronze; later it can be compared with designs in lacquer, pottery and other media. There are jades from China which seem wholly or partially strange in the generally accepted place or time of their setting, however. It is not impossible that these were imports or products of Chinese borderland industries. China is vast. The range of regional styles is as yet scarcely admitted, much less known.

The running stag on page 98, for example, is different in stone, style and "feeling" even from the comparable fish-dragon and less distinguished quadruped on page 97. It is in all likelihood a Sino-Mongolian or Sino-Tibetan borderland work.[5] The barrel-chested, unlovely dancing figure on page 92 is also puzzling. Compared with such Chinese jade dancers as the exquisite "twins" of the Freer Gallery necklace or plainer, but still clearly Chinese, dancers of Late Eastern Chou and Han times,[6] it looks more like the chestier pottery warrior figurines of the Six Dynasties period. Thus it may be "other" — Central Asian or Turkic — and/or later than the typical Chinese products of its kind.[7] The capped and earringed human head on page 79, in contradistinction, belongs to a considerable group of Chinese jades with haunting Central American affinities,[8] while the mask cartouches on the light green bracelet (page 99), probably from South China, echo, or rather prefigure, the Tiki masks of the Marquesas and other island images of the Pacific.[9]

A most striking problem of origin is that of the justly famed, so-called "Indian" or Moghul jades.[10] These alone rival the Chinese in beauty and *tour-de-force* skill, but they are different in kind and style. Carved into asymmetrical vessels, dagger-handles, etc., their thin, fine, lobed and polished surfaces are sometimes left plain. Often they are intricately carved with floral and animal patterns, then inset with precious stones and gold — not at all to the more austere Chinese taste. Yet there was a vogue for such jades in China in the 18th century and they were made there at that time and later. Two or three white jade bowls, a pair of nephrite dragon-bracelets inlaid with jadeite beads, etc., illustrate the "Indian style" in this collection. Was there not, in fact, another industry (perhaps even of ancient standing) closer to the jade fields of Khotan and Yarkand in Central Asia, of equal power to the Chinese, although late-flowering, and influencing it? Or were the Moghul jades of India made there or in China by Chinese craftsmen and mainly in the 18th century, as Hansford believes?[11]

This question is asked with increasing frequency due to the sharp rise in Chinese art prices, on the one hand, and to advances in scientific testing on the other. In the mineralogical versus the general and traditional sense, jade means either nephrite or jadeite. It was harder to come by and harder to carve than the serpentines and other hard stones, often of considerable beauty, included under the term in its broadest sense. It took more time and skilled labour to work. From the beginning nephrite was a luxury, the property of the high-placed few—thus, its early association with rank and then with feudal and Imperial authority.

In the Bronze Age, moreover, the beautiful but obdurate material affected its own design. Curves, openwork, perfection of polish were beyond reach of the early craft in a stone harder than steel. Too smooth a line, too neat a turn of silhouette should immediately suggest a later technology or a softer stone and thus affect historical placement and evaluation. Surface patterns in relief line are clearer in Shang marbles than Shang jades, for example. For the tiger plaque shown on page 62 a genuinely antique stone, probably nephrite, was sliced to extreme thinness and evenness, then embellished with a modern drill and abrasive. Its cold perfection belies the Bronze Age style.

The Chinese term *yü* was used with even greater poetic license than the equivalent "jade" (the English version of a French corruption of *l'éjade* for the Spanish *piedra de ijada* "stone of the loins" discovered by the Spaniards, along with the more spectacular gold, in the New World.[12] Under the heading of jade at one time or another have come nearly all stones of some hardness or beauty which take carving and fine polish, from nephrite to marble and even soapstone. Thus one reads of jade (marble) balustrades and white jade (again marble) doors to Imperial tombs. Like gold in Western parlance, as in "golden moments," "heart of gold," etc., *yü* was an honorific metaphor, and like gold it was taken internally.

The Chinese early distinguished and loved true jade (*chên yü*), however—rare, beautiful, hard, and in its purest state incorruptible, like the Immortality it stood for and was thought to effect. This *chên yü* is our nephrite (from the Latin *lapis nephriticus* which preserved the earliest association of American jade with the well-being of the kidneys). Chemically it is a calcium-magnesium silicate, a metamorphic rock-forming mineral of the amphibole group. It has a hardness of 6 1/2 on the Mohs scale, a hierarchy of natural stones from talc to diamond based on the scratchability of the softer by the harder (now replaced in laboratory testing by the mechanical but more precise Knoop or VPH, Vicker's Pyramid Hardness, tests[13]). Its absence or extreme rarity in China itself is suggested by the virtual worship accorded it there. To date it has not been found in China, the best candidate for a native Chinese nephrite, the Nan-yang *yü* of Honan having been found by A. Schüller to be an impure pyroxene.[14]

From late Neolithic to late Imperial times the nephrite carved in China seems to have come from the jade-bearing mountains and rivers of Central Asia over land routes more than 2000 miles long and six months journey from Peking. In pre-Ch'ing times it came mainly from the Karakash and Yurungkash (Green and White Jade Rivers to the Chinese) of the oasis kingdom of Khotan, also known for its Buddhist relics. Only later were the mountains and rivers near Yarkand, about 200 miles northwest of Khotan, tapped and "fished" for the huge supplies of nephrite required by the late Emperors of China, and fashioned for them into the larger vessels of purer stone of the 18th and 19th centuries, the large chimes and great seals of state associated with the last Imperial Dynasty.

The "spinach" nephrite from the mountains west of Lake Baikal in eastern Siberia is often characterized as having small black speck inclusions of graphite or chromite. Apparently this major source of jade was not noticed until about 1850, after which it was much sought by Imperial Russia. It is thought (due to failure of mention in the literature) not to have been used in China before the same century.[15] However, a number of polished rectangular plaques from burial garments probably of Han date have just such black inclusions. Either Baikal jade was known in Han China, or other sources carried the specks associated with Siberian nephrite.

Jadeite, "*fei-ts'ui*," is the second mineral which can properly, though not with equal reverence, be called jade. It characteristically shows more lavender whites and brighter (chromium) greens than the nephrites. There is general agreement that it was not worked in China until the 18th century, and there is not much concern with it in this catalogue, prized though it is, especially for jewellery. Named in Europe in 1863, jadeite is a sodium-aluminum silicate even harder than nephrite (6 3/4 on Mohs' scale) belonging to the pyroxene group of minerals. Photomicrographs of thin sections of nephrite and jadeite reveal different structures. Nephrite is made up of tiny crystals compressed in a densely "felted" mass of fibres which make it not only hard but also extremely tough; jadeite is crystalline (see Hansford, *Chinese Jade Carving*, pl. 1). Most of the jadeite worked in China came from Upper Burma, particularly the Tawmaw region whence it was transported to Mogaung, on to Rangoon, and then by sea to Canton and Shanghai; some went by the more arduous land route from Burma to Yünnan, giving rise to the legend of Yünnanese jade. Gustav Haloun's evidence is cited for Chinese acquisition of Central Asian nephrite in Late Eastern Chou times, with the Yüeh-chih peoples, then just west of China, as intermediaries.[16] The ambassador Chang Ch'ien's account of Khotan and its jade is recorded in the *Shih Chi*, China's first great History, confirming Han sources. There is no evidence for jadeite in China in such early times, nor was the colder, harder stone ever loved there in the way that nephrite was.

In the final analysis even a mineralogist especially interested in jade will admit that he cannot distinguish true jade from other polished hardstones by eye and hand alone, despite folklore concerning lustre, coolness to the touch and even non-scratchability with a steel blade, although the latter is a good sign. There is at present but one sure test for jade. This is X-ray diffraction analysis of patterns made from small samplings of the purer parts of the stones. Desmond Gure published photos of the different patterns produced in this test by actinolite (nephrite), jadeite and serpentine.[17] About twenty pieces from the ROM collection have been tested in this way, the results being noted in the Catalogue. The rest may or may not be nephrite. The ROM jades are presented here in the traditional rather than mineralogical sense. They have been chosen for their beauty, symbolic and historical value. Until further testing can be done in a primarily mineralogical study the stone shall remain "immaterial."

It was the great sinologue, Paul Pelliot, who may first have suggested that a study of jade as craft would be helpful in solving some of the problems of Chinese jades. In *Chinese Jade Carving* (1950), on the basis of first hand, comparative, literary and historical studies, Howard Hansford estimated the progress of jade working in China from earliest times to the present. This was in terms of *tools* of different types and sizes, such as saws, drills, points—probably stone, bamboo and bone in Neolithic times, then with the addition of bronze tools, then (after about 500 B.C.) iron; *abrasives* (believed carried in a grease medium until the use of the treadle-lathe, then moistened with water)—local quartz sands, crushed garnets, corundum ("black sand" or emery), and in the 20th century the imported, artificial, but most effective abrasive of all, carborundum. Hansford allowed that diamond points may have been used quite early, or from the (undatable) time of their discovery. He is certain that they were employed to cut numerous 18th century and later inscriptions on jades particularly of the Ch'ien-lung reign (1736-95). Wood and leather may have been used from the beginning for polishing and buffing. The pale grey "secret" formula of *pao yao*, "precious (polishing) powder" of modern times was found, upon analysis, to contain calcite and varying amounts of carborundum, the more the better.[18] Signs of advances in tools, abrasives and other technical equipment help to date a jade about which little else is known.

William Willetts made the important point that "jade carving is, and always has been, a lithic industry."[19] That is, whatever the setting and vehicle, the effect is achieved by the rubbing of stone on stone. The traces of this process of "attrition," especially on earlier jades, are visible. When the stone has the hardness of nephrite (even now it can take two men weeks to saw through a block of it) the signs of struggle tell. Simply looking at jades tells one a great deal about technique and thus date. The relative position of a piece in a series, for example, can be estimated in this way, though an absolute date may be lacking. Such evidence is *internal* and *primary*.

Neolithic stone axes were finely fashioned only where they were to be effective—that is, the main body and especially the cutting edge; the butt end was neglected. An early perforation like that of the greenstone axe (page 41) is invariably conical or biconical. In this case it is biconical and ridged inside where the drilling from the two sides did not quite meet, nor was the ridge polished away as it might be in later pieces. In still earlier and rougher examples there is an "aura" about the hole from the pecking process preceding the drilling or boring, and other marks of rough or tentative beginnings. The Neolithic *pi* disk tells a similar story in a different way. The "wall" of its open centre slants strongly in one direction only, with faint ridges from the turning of the tool. Neat and polished cylindrical bores and vertical walls scarcely occur before Late Shang times (12th and 11th centuries B.C.) when bronze tools were in use. The back of the *pi* has a straight ridge running across it where the sawing of the piece from two sides of the block also failed to meet smoothly. The strongly conical and ridged perforation, the uneven slice and imperfect circle of this disk all point to a Neolithic industry, as does its low polish and surface and edge pitting. The earlier the piece, the less one can date it from style, the more from technique.

In Shang times, as we see from a tadpole (page 49), a dragon pendant (page 52), and figured arcs (page 53), there is clear evidence of recarving from earlier blades, fragments, and especially disks of *pi* and *hsüan-chi* types. Recarving provides the clearest proof of sequence if the original was not featureless. The most striking instances of this kind of information about

a jade are (1) the Late Shang or Early Western Chou fish pendant (page 53) with its Late Shang style (but probably Chou date) half-mask decoration, and (2) the pair of bowknot-shaped ornaments on page 69. The latter when seen from the front show the double-line incising associated with the Shang style, suggesting a Shang or Early Western Chou date. On the back of both fittings, however, there is a curvilinear dragon design datable to Later Western Chou. Since this was clearly cut into to make the bowknots, the decor on the front must be later than that on the back and we have one sure, if short, sequence of designs.

Finer openwork than that of the small dragon seen on page 52, on jades excavated from (Late Shang) Anyang suggests wire- or perhaps string-sawing (given enough abrasive embedded in a string, it is said that the stone will wear before the string breaks).[20] The same is true of ruler-straight, razor-fine geometric "etching" like that on the *kuei* tablet on page 125, although this is an archaistic piece. From late Shang onward forms become more even, and can be as long, thin and fine as the *chang* sceptre of page 46. These would be inconceivable as products of a Neolithic industry. In Shang, too, *tour-de-force* though it was, jade workers often followed bronze vessel and weapon designs which help to date the jades. Even with metal tools, however, relief and incised linework such as that shown on pages 51-53 often has an angularity about it or some minute scratches or other traces of the weakness of method or tool in the face of the hardness of the stone. Smoother lines, a more curvilinear style of the kind seen in the fish-bird (page 55), along with true bevel-cutting like that in the dragon designs on the backs of the "bowknots" represent Western Chou technical advances of the 9th to 7th centuries B.C. These do follow a more flowing kind of bronze decoration, but would not have been possible to the Shang jade carver. Another Western Chou achievement is a smoother rounding of forms like the horns of the goat mask, or the silkworm's body (not to mention the "Neolithic Style" bird) (page 67).

The possible use of iron tools from about 500 B.C., as well as harder and finer abrasives, must have been discovered by Late Eastern Chou. In this "Warring States" period (480-222 B.C.) virtually any and every effect ever achieved in Chinese jade —finest cutting, sharpest and roundest detail, hair-fine linework, openwork, undercutting and linkage of two or more pieces worked from a single stone, and even that high, vitreous polish associated with 19th and 20th century jadeite jewellery—was apparently mastered. It is not impossible, as Hansford noted, that the diamond point was used at this early date, but even with it the design, execution and polish of these pieces could scarcely be believed had not some been scientifically excavated from Eastern Chou and Han tombs. It is one of these peculiarities of art history that in the Warring States period, under the worst possible political and social conditions, this "great leap" occurred in luxury jade carving. One would think the precious stone itself inaccessible in such troubled times, but it apparently arrived, on occasion in quite large pieces, judging by the great, spiral-decorated *pi* disk represented on page 83. The Eastern Chou date of its decoration is certain. Roughly half of it, pieced together from fragments, shows its diameter to have been nearly 12 inches. The stone has been tested and is nephrite.

Han and all later achievements in Chinese jade carving were based on those of Eastern Chou, although there were new forms and further elaborations. An example of both is the green ring (page 72) with its ornate, finely engraved, openwork "collar." With the Ch'ing Dynasty (1644-1911), especially in the long Ch'ien-lung reign of the 18th century, came jadeite from Burma, sure use of emery and the diamond point, and another unparalleled kind of perfection (except for a few earlier vessels of jade), the hollowing and decorating of the massive nephrite vessels associated with the Ch'ing industry. Even these had Late Eastern Chou precedent in the beautiful small vessels believed to come from Chin-ts'un, "Old Loyang."[21]

There is controversy over the earliest use of the circular saw. Study of the ROM jades reveals that there are straight saw-scars on Ch'in-Han pieces of some size and pretension, while the curving scars visible on many a large, early looking jade of ritual type (taken by some as evidence for a Bronze Age circular saw) may have been quite frank signs of Late Ch'ing archaism. There are none of these arc-shaped shadows on convincingly early-looking large blades and disks of Shang and Chou. Like the too-neat, though conical, perforations and the hard regularity of form and edge on these often honey-brown "calcified" "megaliths," circular saw marks on Bronze Age forms should probably warn the collector of a Ch'ing Dynasty date. Hansford states that the circular saw may not have been used before the Six Dynasties period.[22] The evidence here agrees.

"External" evidence for dating Chinese jades consists mainly of archaeological, historical and literary testimony. This is difficult to interpret. It must be sifted carefully and used only with frequent reference to what the jades themselves may confirm or deny. There are three periods of digging in China: (1) nocturnal, the period of grave robbing—from earliest times to 1928 and continuing; (2) a period of semi- or proto-scientific archaeology interpreted by Chinese antiquarians from Sung on and by Western scholars like Andersson, Karlbeck, Menzies and White (mostly careful notation of gleanings from archaeological sites only occasionally directly observed) —*c.* 1910-40; and (3) modern and scientific archaeology—1928-1966 and continuing.

Ch'ing archaistic *kuei* tablet (928.12.185) showing curving saw-scar.

Questions left from the first period are sometimes answered through stylistic analysis, literary reference or "third period" archaeological findings. In 1968, Hansford summarized the major finds relevant to jade studies in his chapter "Archaeology," and both his book and further material from Chinese site reports and journals will be cited in connection with specific jades in the Catalogue.

The Chin-ts'un finds are a good example of the achievements and problems in the second period of archaeology in China, and one with which one must wrestle due to the fair number of Chin-ts'un jades in Toronto. The eight better-known "Tombs of Old Loyang" were located outside the east gate of the village of Chin-ts'un, roughly ancient Ch'êng Chou, about 13 miles northeast of modern Loyang in Honan. The nearby foothills of the Mang Shan range, between the Lo and Yellow Rivers and overlooking such many-lived ancient city sites as Loyang, were a favourite burial ground in several periods – when the Eastern Chou capital was there from the 6th to 4th centuries B.C., under the Eastern Han, Western Chin, Northern Wei, Sui-T'ang and onward. About 1929, according to Bishop White, highly interesting bronzes and jades reported to have come from Chin-ts'un began to come on the market. Largely through "trusted agents" whose stories seemed to tally, Bishop White gathered, annotated and published (in 1934) what he could of these finds. The book was a revelation at the time and is still the primary reference for a body of material which, even in the light of later and surer findings, may be called Chin-ts'un style bronzes and jades.

Crucial to the dating of site were fourteen bronze bells of the Piao family whose cast inscriptions lauded the chiefs of the Han Kingdom (not Dynasty). Mention in the inscriptions of a regnal year believed by most to correspond with our 550, by some 380 B.C., gives the date of the bells and a *terminus post quem* for their burial, while the small, feudal Han Kingdom was annexed by Ch'in in 230 B.C. Thus, the 5th-3rd century B.C. dating of Chin-ts'un and everything in it, or reported to be from it.

Bishop White was extremely careful not to represent his findings as absolute. He was not on the site during the "harvest." He characterized the digging as secret and incomplete. In this kind of excavation, reports of the exact find place were sometimes deliberately misleading lest the interested party acquire his objects and his notes on his own, on the spot, without the "trusted agents." White admitted that the Piao bells may not have come from tomb VII, the most thoroughly excavated of the eight burials discussed and the one to which the majority of the finds were attributed, or even from Chin-ts'un.[23] He noted the rarity of the (reported) octagonal shape of the tomb chambers. He expressed doubt as to the pre-Han date of such Han pigs as his No. 360f, reported, like all other objects he illustrated, to be from Chin-ts'un. The Chin-ts'un jades published by White range in date from the Early Western Chou "Handle" (page 57) at least to the type of Eastern Han pig shown on page 94. In the cases of his ring-disk No. 306a and drops No. 331a, a Sui-T'ang date may not be out of the question. For these reasons, and while citing White's information, the Ch'in-ts'un jades must be studied as though they had no provenance.

We must occasionally do the same even with the finds of modern archaeology when they suggest widely differing times and places of origin. T-section rings such as that on page 47 (only stronger and wider), for example, and cylindrical bracelets comparable with that on page 42 have been scientifically excavated from Neolithic burials in Shantung and Malaya. In Ning-yang Hsien, Shantung, a skeleton with a (T-section?) disk at his right wrist and a cylinder on his left was photographed *in situ* in a Lung Shan Late Neolithic context.[24] A Neolithic burial at Gua Cha, Kelantan, Malaya, believed to fall in date between 1500 and 800 B.C. on the basis of Carbon 14 tests, revealed a jade T-section ring encircling the right wrist bones of the occupant.[25] Thus we know that jade disks were worn as bracelets in early, if not earliest, times. The very impracticality of a disk on the right wrist suggests that the form was not invented as a bracelet. Other theories as to origin remain. The evidence suggests that the plain and collared disks originated earlier and elsewhere than in the Lung Shan (Black Pottery) phase of the Chinese Neolithic. By that time they may already have become the ornament of an aristocracy of sorts, or a group which did not work with the hands.

The picture is richer but even more confused when we find that discoidal bracelets were worn on the right hand by dancers, musicians and cowherds(?) – sometimes in combination with what appear to be banks of cylindrical bracelets – in the Han period art of the Dongson-related site of Shih-chai-shan in Yünnan Province.[26] Jade T-section and cylindrical rings were also found at this remote but rich southwestern centre. This gives a range in place and date from Shantung in the northeast to Yünnan in the southwest, from the 2nd millennium B.C. to the 2nd century A.D., for discoidal and cylindrical bracelets worn on the right and left wrists, respectively. Does this scientific archaeological evidence help with historical placement of these forms and understanding their original home and function? To an extent. It suggests, as stated, an origin and original function other and earlier than the Lung Shan Neolithic in Shantung. And it gives us an idea of the lifespan of a form in time and space within the gigantic cultural sphere which was China.

Another jade form which would appear to be Early Bronze Age but for which Shih-chai-shan offers interesting parallels is a ridged ring of the type shown on page 42. Both jade and gold examples were excavated from burials at the Yünnan site.[27] They may have been worn as "bracelets" although they are small. Earrings related to the so-called "*chüeh*" type (page 70, far right) were excavated from the site, and its pictorial bronzes show figures wearing them. The ridged ring "bracelets" may also, however, have been earrings of the type worn within the earlobe by Indians and other South Asian peoples. Their similarity to the ridged ring body of the ornately flanged jade (page 72) (almost certain to have been an earring of Pacific type[28]) would enhance this possibility. At least one kneeling bronze attendant from Shih-chai-shan seems to have such hoops in the ears.[29] Finally there is the head or mask type represented by the toggle (page 79) apparently with rings or plugs in the lobes of the ears, suggesting that other kinds of earrings than the "*chüeh*" and probably of southern origin in China were worn between the Shang and Han periods and perhaps later.

Pioneers in the Study of Jade

Anyone writing about Chinese jade today "stands on the shoulders" of a long line of distinguished scholars and sinologues beginning with the Sung antiquarians who first attempted some objective appraisal of China's past and its incomparable artifacts, including jades. Of these, it must be remembered, they had fewer examples to contemplate than are known to us now both "in the flesh" and in photographic reproduction. Nieh Ch'ung-i's *San Li T'u* "Illustrations to the Three Rituals" was first compiled in Northern Sung with drawings meant to illustrate the forms of ancient jades but actually often illustrating only confused and confusing literary descriptions. The pioneer in China of the kind of modern study which seeks critically to identify the terms and descriptions in the literature with known existing jades was Wu Ta-ch'êng—statesman, soldier, scholar, collector and author of the *Ku-yü t'u-k'ao* "Illustrated Study of Ancient Jades," which he published in 1889. This catalogue, with line drawings and commentary on Wu's personal collection (some ten or more pieces from which are now in Toronto), was long the most influential work on jade in the Chinese language. In *Jade: A study in Chinese Archaeology and Religion*, 1912, Berthold Laufer made Wu's work known in English along with the results of his own study, reproducing many drawings from the *Ku-yü T'u-k'ao* with others from more dubious works. Laufer noticed the formal likeness between many ritual jades and ancient weapons and tools but, like Wu, he was too book-bound to make a point of this.

It was William Willetts who divided the main ritual jades into classes according to the most likely practical prototypes, with the *pi* forms (I include under this term the ancestral or variant T-section disk and the *hsüan-chi* or notched disk) and the *tsung* square-sided cylinder in doubt as to prototype.[30] Problems left by Willetts' list—aside from its continued tolerance of a plethora of Chinese names—are the retention of the term *hu*, writing tablet, for the jade form of the East Asian and Pacific rectangular knife which might better come under the general *kuei* "tablet" heading; the derivation of the form now generally called *ya chang* or *chang* sceptre from the bronze *ko* dagger-axe (Hayashi noted its probable bone ancestry[31]); and the inclusion of jade spearheads with Ritual Jades.

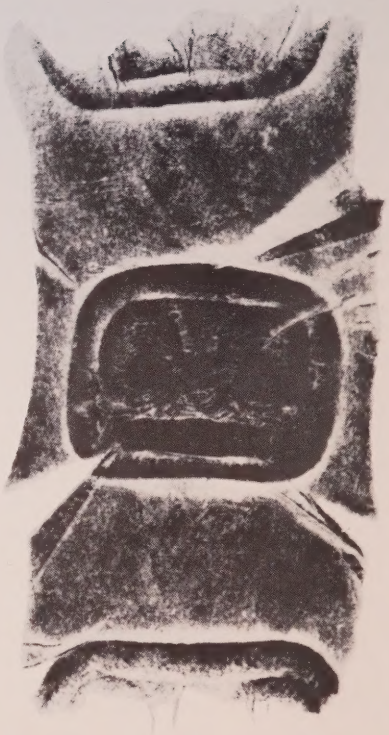
Paul Pelliot in his *Jades archaïques de Chine appartenant à M.C.T. Loo*, 1925, let his incomparable mind range over the facts and assumptions published to that date; without archaeological data, however, many of his dates no longer hold. In 1928 began controlled excavations at the Shang-Yin centre and burial ground on the Huan River near Anyang in Northern Honan (the finds are still in the process of being published in the rich detail they deserve), Bishop White's discoveries at Loyang, and the richly illustrated works on Chinese jade of Umehara Sueji, Alfred Salmony and, most recently, Na Chih-liang. S. Howard Hansford's *Chinese Carved Jades* of 1968 and Hayashi Minao's long paper of 1969 on ceremonial jade (in Kyōto's *Tōhō Gakuhō* XL) take into consideration the entire range of published jades, opinions about jade and archaeological finds of jades from the 1920s to the last reported ones from mainland China in 1966. Hansford refrained from coming down on one side or the other of many questions, such as that raised by Henri Michel's endlessly fascinating but persistently problematical theory of the combined use of the *tsung* and *hsüan-chi* in star-watching.[32] His work is probably the most useful summary in English to date, however, on the subject of Chinese jade in its totality. For more works on jade up to 1952 the reader might consult Carolyn Denman's "Jade; A Comprehensive Bibliography," in *JAOS*, LXV, 2 (1945) with F. A. Johns' additions in volume LXXII, 3 (1952) of the same journal. Last but not least, we look forward to Max Loehr's study of the Grenville L. Winthrop jades, bequeathed to Harvard University's Fogg Art Museum, and still the world's most consistently fine private-become-public collection of Chinese archaic jade.

Chinese Sources for the Study of Jade

The main historical sources are the *Chêng Shih*, the twenty-five Dynastic Histories, which were compiled on a regular and similar basis after Ssŭ-ma Ch'ien's great original of Western Han, the *Shih Chi*. These are valuable primarily for the earliest references to trade in nephrite with Khotan and later Yarkand, the first notice of Baikal jade in China, first record of the importation of jadeite from Burma and the like, although first mention in the official literature does not necessarily mean first acquaintance or use; the histories are but one guide to, and support of, archaeological and art-historical research.

Also of use to sinologues are the *lei shu*, encyclopaedic compendia of classified extracts from existing writings on a wide range of topics, from the tenth century *T'ai-p'ing yü-lan* to the *T'u shu chi ch'êng* "Great Encyclopaedia of K'ang Hsi" published in 1726 after that emperor's death. The K'ang Hsi Encyclopaedia has eight chapters about jade, with further references under other topics. For "jade" as "medicine" and jade lore of this kind Hansford cites the Ming pharmacopoeia *Pên ts'ao kang mu* by Li Shih-chên and a variety of alchemical treatises, while for a summary of information about the stone his major reference was the revised and enlarged (1927) edition of Chang Hung-chao's *Shih Ya*, first published by the Geological Survey of China in 1921. To use these sources effectively takes a broad and deep knowledge of Chinese language and literature covering a long period of time, testing and sifting of terminology and phrasing in various editions, the spotting of forged works or sections of works. Few Chinese and fewer outsiders have this ability. I list these sources here because they are important for research in depth, particularly the study of the Chinese view of jade over the ages—an independent topic not yet treated as such in a definitive way—not because they are directly involved in this brief introduction. This holds true for the classical literary sources as well.

The chief early source for the ritual jades (see fig., p. 27) is the *Chou Li*, "Rites of Chou,"[33] one of the so-called Thirteen Classics. Its core is believed to date from 4th to 3rd centuries B.C., the period of the Warring States—with, however, mistakes through repeated copyings and later interpolations within the text as well as commentaries upon it. It is from the *Chou Li* that we learn the jades with which the Master of Religious Ceremonies of earliest Chou is supposed to have paid respect to Heaven,



Rubbing showing mask cartouche design of bracelet, p. 99.

Earth and the Four Quarters. The *Chou Li* also names six jade objects as types of jades proper for royal or noble burials. A passage linking particular jade forms—or names—with the ranks of the feudal nobility reveals its Han date by reference to the *ku* "grain" and *p'u* "rush" or "basketry" pattern *pi* disks as the insignia of nobles ("viscounts" and "barons") of the fourth and fifth ranks. The *p'u* or rush pattern *pi* (see page 86) seems to have been a product of the Late Eastern Chou to Han industry, while the most likely candidate for the *ku* or "grain" *pi*—that with fine smooth bumps no longer given spiral form—has been excavated only from Han and later tombs,[34] the earliest example of the type illustrated here being the T'ang Dynasty *pi-kuei* (page 102). Eastern Chou spiral decoration is unlikely to have suggested grain, and the spirals gave way to more grain-like designs only in Han times.

Any validity the *Chou Li* may have had as a representative of Earliest Chou practice was most incisively demolished by Willetts: "The *Chou Li* compilers invented ceremonial jade roles for such archaic jades as were known to them and gave them names. Sometimes they essayed an explanation of a jade's ceremonial role in terms of its shape. More often this was left to the ingenuity of later commentators, who inherited the text but, all too frequently, not the jades described therein. The next stage in the obliteration of the jade's personality was therefore to reconstruct it in imagination, and reproduce it in the form of a drawing; this done, we are confronted with a chimera based on a commentator's interpretation of a ritualist's conception of the role played by a given jade, known to him, in a ritual that may never have been enacted. This was the tradition received by Wu Ta-ch'êng and Laufer . . ."[35]

Pelliot questioned this tradition and Willetts, Hansford and others consult other and earlier classics—particularly the *Shu Ching* "Classic of Documents" or "Book of History" representing the 9th to 6th centuries B.C., the *Shih Ching* or "Book of Songs" of the 10th to 7th centuries B.C., and the *Tso Chüan* "Commentary of Tso," a late 4th century B.C. compilation of historical anecdote about events of the 8th-5th centuries B.C. simply listed in the more tight-lipped "Spring and Autumn Annals" (of Confucius' native state of Lu). These refer to what we call ritual jades but give no account of any such rites and uses as those described in the *Chou Li*. There are references to jades as insignia of feudal rank and tokens of authority, carried on missions and presented in audience, to their sacrifice to rivers for various ends, to their being begged, borrowed and stolen in interpersonal and interstate rivalries and also to their occasional burial for divinatory purposes. Most interesting is the absence of any recognizable mention of the *tsung* in these earlier texts, and the *Tso Chüan* entry for 558 B.C. in which the term *pi* is used in the sense of an uncarved gem rather than a ritual or other disk.[36]

So much for tokens, insignia, ceremonial and sacrificial jades—most still uncertain as to the relation between form and name. Whatever their origin and original uses, we are still left with the *Chou Li* for those forms which played a part (real or imagined) in an ordered system of ritual. The *Chou Li* still defines the ritual jades and gives the earliest account of them as a group. It may have been descriptive for its time, if that is established, and was certainly influential later. It is perhaps significant that none of the earliest pictorial evidence gathered and analyzed by Charles Weber[37] shows ritual involving recognizable ritual jades, although many of the activities illustrated on the Eastern Chou pictorial bronze vessels have a ritual flavour. Standard ritual jades are, on the other hand, represented in the pictorial art of Han when, however, they seem to be either auspicious tokens or decorative adjuncts.[38]

Types or categories of Chinese Jades

General

A typological approach to the subject of Chinese jade through the ages might be ordered under such categories as follow: (1) Weapons and Tools, (2) Archaic Jades, (3) Ritual Jades, (4) Personal Ornaments, (5) Burial Jades, (6) Sculpture and (7) Vessels (the latter, carved out of stone, being a variety of sculpture). There is overlapping, of course, among all categories. Shang ceremonial jade weapons and tools become Western Chou feudal insignia, while in Chou and especially in Han and later times the latter take on ritual and quasi-religious significance not, perhaps, original to the forms. The large and late slotted-disk chimes, such as that on page 71, and the *ju-i* sceptre (not illustrated), for example, probably developed from personal ornaments of the archaic period like the slotted earrings, on the one hand, and a jade belthook form on the other. Cicadas come under sculpture, ornament and the *han-yü* tongue-pieces of the burial jades, depending on when they were made. Except for a group of cicadas and another of beads illustrating formal and decorative developments from Shang into Han times (pages 126-129), the plan of the Catalogue is in general historical. This is partly for the sake of variety, partly due to gaps in sequences of other forms which make the typological approach impractical. Archaistic jades, fakes and one or two "borderline" pieces are distinguished by asterisks in their Catalogue entries.

Weapons and Tools

Historically the earliest category, except for a few simple ornaments, is the "practical" group of Weapons and Tools. Nephrite axes, which have been excavated from burials of both the Yang Shao (Painted Pottery) and Lung Shan (Black Pottery) phases of the Chinese Neolithic, crown a long series of these primary tools from roughly shaped pebbles and thick, uneven implements to something like the greenstone axe of page 41. Jade axes were probably ceremonial rather than practical from the very beginning; Willetts believes the earliest were made primarily for burial.[39]

The blue-green nephrite square axe (page 44) and the smaller, thinner, and still finer, if calcified, axe (page 50) show an early Bronze Age development of lateral processes on axes (perhaps reflecting the notching of weapon and tool sides to facilitate hafting or lashing with cords) toward forms influenced by aesthetic rather than practical concerns. A parallel development is seen in the flanges on bronze vessels from "shyer," plainer, more compact ones to the flamboyant projections of the Yin-Chou "baroque." Miniature jade axes and chisels fashioned on flakes from larger pieces for talismans or amulets may have been made almost from the beginning. In Western Chou times, jade flanges (associated in burial with axe and handle forms and other small jades) were fashioned separately (page 66), possibly for inlay in wood like the marble and shell flanges edging remaining patterns from lost material in the earth of the great tombs at Anyang.[40] By Ming times the jade axe had become a noble ornament (page 115). "In China no form was ever abandoned or superseded entirely."[41]

From a Shang pictograph showing a human figure with an axe in place of a head, a Chinese axe god (deified sacrifice?) might be inferred, for the pictograph is hieratic rather than "narrative" in form. A horned human figure excavated in 1959 from a Western Chou burial near Loyang lends support to the idea of the deified tool, fashioned as it was from a jade axe or adze.[42] The early Chinese figure, however sedate, recalls Olmec and later axe gods of

diopside jadeite from Mexico and Costa Rica.[43] Also under the heading of practical-become-ceremonial jade forms comes the *pi* disk in its several kinds if one subscribes to the theory of a weapon or tool origin.

The long, ultimately gigantic jade (or other finestone) blades like those of pages 64 and 65 represent a deification through material, enlargement and refinement of the East Asian and Pacific rectangular stone knife hafted, with the aid of perforations for cords or thongs along the spine, with a wood or leather grip.[44] Late Shang and Western Chou jade knives with tangs commemorate metal rather than stone prototypes and belong to the Bronze Age. By Eastern Chou times ring finials and other features of bronze and iron knives, normally of metal, might be made of jade.

The jade *ko* dagger-axe blade, sometimes still held in a turquoise-inlaid bronze socket, belongs to the Shang and Western Chou periods in China and was certainly ceremonial, although the bronze weapon evolved toward ever more complex and "practical," not to say lethal, forms. Jade blades of this type, however, became stereotyped in the Middle Chou period toward the standard and ritual form of the (*ko-*)*kuei* tablet. Jade halberds in the ROM range in length from 16" (a calcified and restored specimen not illustrated) to miniatures carved whole of jade and pendants made of broken tips less than one inch in length. Jade spear, lance and arrowheads are, in the main, a Shang phenomenon.

There are two arguments for a Shang period sword or dagger, or at least for Shang knowledge of a sworded people. One is a Shang pictograph of a frontal human figure with a large, cruciform (*ya-hsing*) head and what appears to be a stick (often with the trace of a high cross-bar) in the right hand.[45] The other is the so-called jade "handle" fairly frequent in Shang and Early Western Chou. (These must be distinguished from shorter, ornamental plaques such as that on page 67 which may have been set into the ends of ladles with curved handles, making the *kuei-tsan* of the classical texts.) The bar-topped, slim waisted, often "ringed" tops set off from the shafts of these handles are analogous to the hilts of Chinese swords as they emerged in Eastern Chou. Some of the earliest jade handles have tenons for attachment; others like the centre handle on page 56 with plain back may have been inset; some may not have been used in any practical way.

The long swords of Eastern Chou like that excavated from a 4th stage burial at Chung-chou-lu with jade pommel (comparable with that of page 84 here) can never have seen widespread or practical use.[46] Their jade and blade ornamentation suggests a limited currency as regalia rather than effective military equipment. Jade sword fittings in Eastern Chou and Han times included pommels or pommel insets, guards, and scabbard jades such as the *porte-épée* or scabbard-slide (see the forthcoming work by W. B. Trousdale on this subject) which facilitated attachment of the weapon to the belt, and jade chapes or scabbard-end fittings. Han Dynasty jade sword furniture is illustrated on pages 95 and 96, while on page 80 is shown one of the finest of the earlier scabbard slides in existence. Archer's thumb rings (page 78) as well as bow ornaments (not illustrated) were made of jade at least by Eastern Chou times, as well as of bronze, marble and bone.

Archaic Jades

By archaic jades here is meant those plaques, pendants or toggles, beads and chimes carved and decorated from Shang through Han which do not quite fit into the other categories listed. Most are small and may reflect a desire to utilize every fragment of the precious mineral. Many must

have had amuletic or symbolic rather than utilitarian or purely ornamental value and not, as with the austere ritual jades, primarily for their form but rather for their subject. They were made for objects and animals as well as for the ornament and well-being of people. Changes in this category of jades tell us more, perhaps, about stylistic developments in Shang and Chou than in any other.

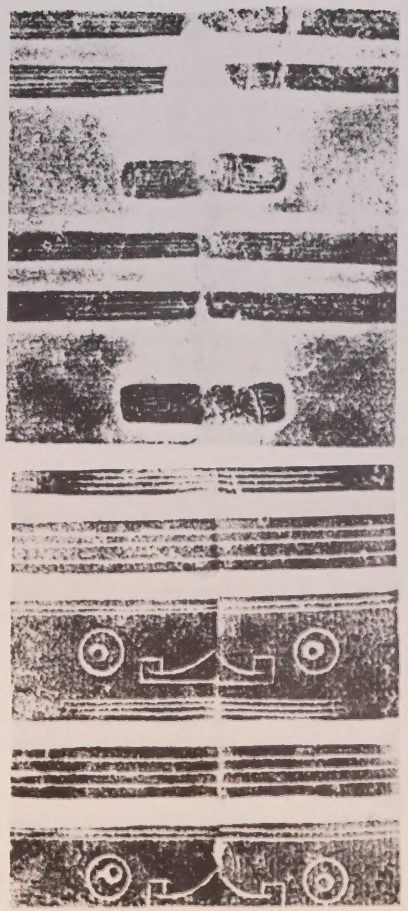
Imperforate plaques with undecorated backs were perhaps designed for inlay, while perforated ones may have been sewn to clothing or fixed to leather. Pieces with one perforation and (usually similar) decoration on both faces were probably pendants. The white bird (page 60) was bored through the centre of its body for stringing as a bead after it had hung for a while as a pendant with the aid of the perforation in its beak (its green "cousin" on page 61 has only the beak perforation). Some archaic jades were perhaps hung from the waist for the same half-decorative, half "medicinal" or protective reasons that lie behind the ornamental girdle-pendant sets of Eastern Chou China, or the pre-Columbian "stones of the loins." A fine jade *t'ao-t'ieh* animal mask was found with a shell above it at the forehead of a horse's skull in an eccentric burial at Hsiao-t'un, the Shang city or administrative centre at Anyang.[47] Clusters of jade fish, as well as ones made of shell, were strung with beads to hang as chimes or jingles from the crossbars of Chou chariots.[48] Archaic jades of all kinds tended toward "nine lives" – buried and disinterred, carved and re-carved, made and copied again and again.

Willetts and many others have noted the outburst of animal art in the Shang period. From the beginning these representations seem to have been of two types with correspondingly different stylistic character (see pages 51 and 52). There are real animals – birds, fish, hare, tortoises and sometimes tigers – carved with the simple, sometimes heightened naturalism of Eskimo animal sculpture, or a timeless realism which would not point to a Shang date or distinguish them from Chou, Han or even contemporary products if examples had not been excavated at Anyang. Secondly, there are the potent creatures of the Shang imagination, notably the *t'ao-t'ieh* frontal animal mask and the *kuei-lung* profile dragon. These are usually fashioned of flat pieces and treated with a conceptual rather than natural kind of surface feature and ornament peculiar to the Shang genius, although the style held over into earliest Western Chou, perhaps even longer in the provinces, and was to a degree revived in Early Eastern Chou. It is interesting, however, lest the picture appear too neat, that some birds, fish, tigers, etc., were conceived in the same angular and geometric way and with similar non-natural body ornament as the *t'ao-t'ieh* and dragon. Thus we are left with the puzzle in jade, as in bronze, of different styles from the same time and place. One cannot help but suspect at least one other centre of influence by the Anyang period.

Most numerous from Anyang are small jade fish, symbols of watchfulness and fertility, some with small blades or implements "attached." Birds include types resembling cock, pheasant, owl, swallow and cormorant (the latter represented *solo* on page 55 but often shown with the fish it may already have been trained to catch in Chou and Han art). Deer, quarry of the hunt, whose horns in velvet were thought to have aphrodisiac powers, belong more to the Chou than to the Shang jade repertoire. They run and leap all through Han and Six Dynasties art (pages 98 and 100); the Sika deer with the

Fungus of Immortality was in later times (see page 105) one of many symbols of luck and advancement. Mainly Southern animals like the water-buffalo and the elephant were represented in Shang art, or in Shang style, an elephant in the collection of the Academia Sinica in Taipei being one of the most famous of Shang jades.[49]

In Han and later times the tortoise, "Dark Warrior of the North," together with the snake, had come to symbolize the North in a symbolic directional scheme. It was also a symbol of longevity. It was probably more important in Shang for its association with water and fertility, and in the Anyang period with divination. In late Shang this was done by producing cracks through heat in tortoise shells (as well as animal bones) and then reading in the direction of the cracks the answers of the god or gods to questions about rain, war and sacrifice. Whether the Han association of the hare with the moon and the "Elixir of Immortality" goes back to Shang is doubtful; perhaps the animal then simply symbolized food and fertility. The cicada was a potent and relatively stable image of resurrection and transformation throughout Chinese art. The tiger had to do with strength, whether benevolent and protective or unfriendly and dangerous. The dragon as we know it took shape only in Han times. The Bronze Age creature appears ineffectual but was ubiquitous and auspicious, probably symbolizing water and fertility. The *t'ao-t'ieh* device, named centuries after the time of its origin in Chinese art, is still little understood. Its flourishing period was the Shang Dynasty and the most interesting changes in it are those of the real animal attributes it might have, especially the horns. The ox was an important sacrificial animal for the Shang and Chou. Horses and pigs, foxes and dogs and the "normal" human figure do not occur in jade before Late Eastern Chou and Han. Then, with the debut of the hydra and of the "chimera" (that winged quadruped most reminiscent of West Asian hybrids), the repertoire is complete but for Buddhas, plants and action. Major jade themes were set by the end of Han, after which variations very nearly take over the field.



Rubbings showing geometric mask designs of corners of *tsung*, pp. 84 and 88, respectively.

According to the *Chou Li,* Chapter XVIII, "He [the Master of Religious Ceremonies] pays homage to Heaven with the green *pi*. With the yellow *tsung* he does homage to Earth. With the green *kuei* he pays homage to the East. With the red *chang* he renders homage to the region of the South. With the white tiger *hu* he renders homage to the West. With the black *huang* he does homage to the North."[50]

A Commentary on the *Chou Li* by Chêng Hsüan writing in the 2nd century A.D. notes that of the six jades proper to burial the *tsung* was placed on the abdomen, the *pi* under the back.[51] The designation of the *ku pi* and *p'u pi* as the insignia of viscounts and barons—dukes, marquises and earls carrying *kuei* tablets—has been mentioned. From such references we know that in Late Eastern Chou and Han times the *pi* disk still had ceremonial, burial, and feudal or status import. It is only in the Han period that the *pi* disk is called what it has been for writers about jade ever since, the "Symbol of Heaven."[52]

The formal resemblance between the pierced disk and the ancient graph for sun with a dot in the centre has been noted by Willetts and others, and it is possibly because of this that it came to be thought of as representing Heaven. The idea that its primary function was for the worship of Heaven and that it was, in fact, a representation of Heaven seems to belong to the Han period. Willetts argued convincingly that it bears no relationship either to the character for the still mysterious Shang Ti, the Shang focus of worship, or to the T'ien "Heaven" of the Chou whose pictograph is in human rather than circular form.[53] (It is perhaps worth recalling, however, the stick figures with dotted circle heads painted on Yang Shao funerary urns from Neolithic Kansu.[54]) An early graph for *pi* represents, according to Hansford's notation, a noble and a suppliant with a circle or disk between them, and has the primary meaning of ruler, rule of law[55]; this graph is reminiscent of "scenes" on West Asian reliefs and cylinder seals of the transfer of a disk or ring between a greater and one or more lesser figures[56].

Theories of possible prototypes for the *pi* include F.A. Kuttner's chime, Hentze's discoidal macehead, Willetts' (1958) flywheel of a drill, and an astronomical instrument (especially Henry Michel's theory of the *hsüan chi* notched disk somehow fitted on the end of a *tsung*). If Hentze's macehead theory, which seems the most reasonable, could be proven, then the T-section disk form of the *pi* may have been an early one, for a disk like that on page 41 with slanting perforation wall would have been difficult to attach firmly to any cylindrical shaft. On the other hand, even if the perforation were larger, it would also have been impractical for a bracelet; for this, again, the T-section ring would have been more suitable, and in fact it was worn on the wrist quite early. Finds of the 50s, however, of round maceheads at the Yang Shao Neolithic village of Pan-p'o near Sian in Shensi bring Hentze's idea to the forefront[57].

The disk at the right wrist in the late Neolithic Shantung burial may have been a form of *pi*[58]. Archaeological evidence includes at least one jade *pi* discovered in a Kansu Yang Shao burial on the breast of the dead. This placement may be linked to the *pi* forms found on the breast near the left shoulder in Middle Chou burials at Shang-ts'un-ling in Honan[59]. Were these, perhaps, a garment device like the rings and disks of jade and other materials in exactly the same place in so many later Buddhist priest portraits from China and Japan?[60] Or could the disks have been ceremonial maceheads come to rest on the left shoulder after the rod, held in the right hand and crossing the chest, disintegrated?

As for the Eastern Chou period a *pi* disk was unearthed at the crown of the skull in a Warring States grave at Ch'ang-sha.[61] In sixth stage and earlier burials at Chung-chou-lu, Loyang, with jade or stone piece-masks from face coverings of the dead, (broken) pierced plaques with rounded rectangular outline apparently topped the assemblages, i.e., were placed above the head. [62] These rough forms cannot be certainly designated as *pi*, but they are suggestive. Finally, in connection with Ku-wei-ts'un tomb 1, Hui Hsien, Honan, a multitude of disks and rings were found massed behind a pile of *ko*- and other *kuei* tablets.[63] The ROM collection includes numerous stone *pi* and *kuei*, reportedly from Old Loyang, which may have been burial offerings, "insurance," generally auspicious tokens of this kind.

For the T'ai-p'ing-ch'ang burial at Hanchou north of Chengtu in Szechuan a reconstruction drawing shows a row of stone disks graduated in size along the coffin top, with two vertical rows of them lining the sides of the burial[64]. Later or Warring States coffin designs at Ch'ang-sha may be related to these, with their real, painted, or wood-carved disks and rings intertwined with real, painted or carved cords—a similar idea, perhaps, to that of the rougher plan in Szechuan but done later in Ch'u in a more decorative way.[65] Thus, archaeological evidence tells us that the auspicious *pi*, jade or jade substitute, was placed on the breast or at the head of the dead, on the one hand, and figured in coffin binding, decoration and offerings, on the other. A jade *pi* with spiral decor from the Winthrop Collection in the Fogg shows scars which might have been made by cords rubbing the face of the jade in four directions.[66]

The only evidence for the *pi* on the back or under the back of the dead which might bolster Cheng Hsüan's statement is on a small jade "deity" in the Fogg Art Museum.[67] This is a human-headed bust with bird "arms" and outsized, ring-like ears. It has a rounded-quadratic, perforated "brooch" on its front (a *tsung*? — cf. a similar device on the front of a Dongson or southern type *ko* halberd figure) and a T-section disk in relief on its back. The figure is a provincial or southern survival piece in Western Chou style. There is no pictorial evidence for the *pi* before the Han Dynasty, and even in Han funerary reliefs and lacquer designs, it appears as an auspicious but half-decorative device, often hanging in figural scenes from a tassel or by a ribbon simply to fill space.[68]

The *hsüan chi* notched disk with three sets of "teeth" or three flanges carved out of the edges of the arms of the whorl circle seems to have been made in very Late Shang or Early Western Chou at the earliest, although plain whorl disks occur earlier. Originally it was probably a decorative variant of the *pi* or disk, with the flange elements added later as they were to axes, crests and other forms. The connection of what we call the *hsüan chi* with the *hsün chi yü hêng* of the *Shu Ching* is tenuous, as is Michel's theory of its use with the *tsung* for determining the positions of the stars. The name, the function and the association with the *tsung*—no *hsüan chi*, as others have noted, fits the end of any known *tsung* —is uncertain. Neither is the meaning of the tangential and perpendicular lines on some *hsüan chi* clear. We must allow this jade more time to explain itself, and allow, too, that it may never do so.

The *huang* arc may have originated from a broken *pi*. Segments of broken disks were sometimes rejoined by perforating the edges of the segments and then stringing or wiring the whole together again. They were also made and used independently from Neolithic times. [69] If one counts as a *huang* a beautiful arc with openwork design uncovered at the neck of a skeleton in a side burial to one of the great tombs at Anyang,[70] then it may have functioned as a necklace as early as Shang. Certainly it seems to have done so in Middle Chou

times, on the evidence of burials at Shang-ts'un-ling.[71]

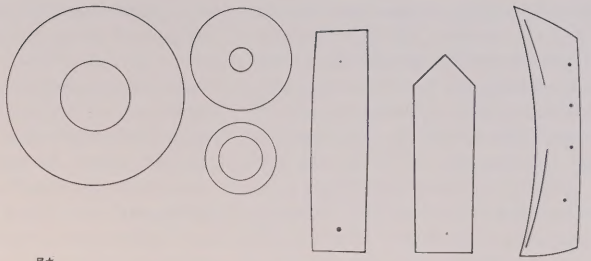
The jade arc worn as a necklace, alone or in combination with other beads, was perforated near the middle of each end for hanging. By Eastern Chou times the form was inverted for use in girdle pendant sets.[72] These *huang* are perforated at the centre of the arc above, sometimes on the ends as well if other pendants were to be attached to them. The earliest kind was still a segment of a disk, that is, an arc of even width from end to end, whatever the length. Later it assumed a variety of bridge-like forms, with ends either flat or upward-slanting but wider than the centre. By Western Han times *huang* arcs could be pictured on a painted lacquer coffin end from a Ch'ang-sha burial as supports for sedate but winged and tiger-riding Immortals in a symmetrical design with a "*chüeh*" shaped, bird-entwined chime at the centre. The "royal *huang* of the Hsia Dynasty" mentioned in the *Tso Chüan*, and even the *Chou Li's* black *huang* used for worship of the North, may have been another form called *huang* than this auspicious, but mainly decorative, jade arc. If so, we do not know what the *Tso Chüan* and *Chou Li* meant.

"With the green *kuei* he pays homage to the East." Under the "strained" heading of *kuei* come nearly all flat or relatively flat jade tablets of archaic period or flavour including axes, adzes or chisels and hoes of jade, straight "handles" (and perhaps jade inlay plaques for curving ladle handles) and then the three types outlined opposite. Of the latter, the long trapezoidal blades with perforations for hafting which, although better called *kuei* than *hu*, might still better simply be termed "ceremonial blades." Like the axes, hoes and handles they remain recognizable forms and need be called by no other name than their own with the addition of "ceremonial" for jade examples. The two best candidates for ritual jade *kuei* are the chisel- and *ko*-derived types. The former evolved from elongated chisels with a sharp edge like the early one on page 46. With a gradual rounding of the upper edge they may have led to the tablets held in audience and carried in procession in pictorial contexts in Han funerary reliefs, sculpture and later painting. These insignia, and the ancestral tablets from family shrines in China which they also resemble were, on the other hand, often made of ivory or wood or other materials than jade.

The *ko-kuei* term makes clear my subscription to the theory that the rectangular tablet with pointed top descended from the Shang *ko* halberd.[74] As can be seen by comparing the Late Shang jade *ko* of page 46 with the Middle Chou *ko-kuei* of page 69 it may well have evolved, in part through recutting, from Shang ceremonial jade *ko* captured by the conquering Chou and awarded to their feudal chiefs at the beginning of the Dynasty.[75] By Middle Chou the *kuei* had achieved its stereotyped and straight form. By then it may also have become for some an object of worship as well as a feudal symbol. The archaeological evidence for this idea is in bronze altar-form plaques decorating, while protecting, some coffins at Shang-ts'un-ling, roughly 8th century B.C.[76] These have *ko-kuei* forms rising from the centres of their flat tops and flanked by birds on stalks. Later there are the jade-substitute stone *kuei*, ranging in form from triangular to rectangular but mostly pointed above, massed in the Eastern Chou burial at Ku-wei-ts'un (and probably also at Chin-ts'un) with accompanying clusters of *pi* disks and rings.[77]

A possible early *pi-kuei* combination of the type drawn at the lower right, opposite, was excavated at the head of a burial assemblage in Chung-chou-lu grave 1723 of the

4th stage (1st half of the 5th century B.C.) at Loyang. A more frequent and, one would think, earlier combination of these two jade forms can be seen on page 102, an example likely to date from the T'ang Dynasty. The Han writer Pan Ku in his *Po Hu T'ung* ("Discussions in the White Tiger Hall") noted that the pointed top of the *kuei* tablet symbolized the male principle, an early reference to the jade as a phallic symbol.[78] Together with the *pi* as on page 102 it may at times or one on one level have had in China the same "*yin-yang*" meaning as the Indian *lingam* and *yoni*. The Middle Chou *ko-kuei* of page 69 stands between the Yin-Chou *ko* dagger-axe blade and the ritual *kuei* tablet. Spiral and rush pattern *kuei* of standard form are known in Late Eastern Chou and Han examples respectively. *Kuei* are mentioned in the *Tso Chüan* entries for 518, 543, and 615 B.C. as used in river sacrifices.[79] The early graph for *kuei* tablet is formed of superimposed *t'u* "soil" elements. There is nothing in the early literature to explain the jade form as we understand it from existing jades, and nothing from archaeological findings to connect it with the *Chou Li's* green *kuei* for homage to the East.



Pi 璧 Disk

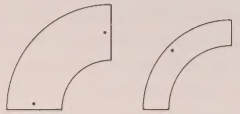
Pi Forms

Chisel *kuei*

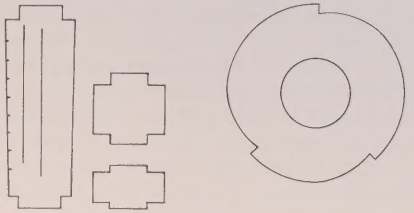
ko kuei

Knife *kuei*

Kuei 圭 Tablets

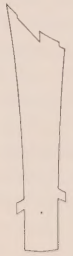


Huang 璜 Arcs

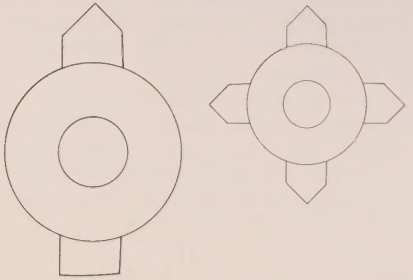


Tsung 琮 Forms

Hsüan-chi 璿璣 Notched Disk



Chang 璋 Sceptre



Pi-kuei (combined) Forms

"With the yellow *tsung* he does homage to Earth." The *tsung* of the *Chou Li* was identified with the type of ritual jade illustrated on pages 45, 84 and 88 by Wu Ta-ch'êng. He tracked it down through a late recorded resemblance to the wheel-nave of a legendary jade chariot, in turn the result, perhaps, of a dimly surviving connection with the character for *tsung*. Under *tsung* the 2nd century "scriptionary" *Shuo Wên* does, in fact, mention a resemblance to a wheel-nave. Chêng Hsüan's 2nd century Commentary on the *Chou Li* described the *tsung* as an eight-cornered symbol of Earth (placed on the abdomen in burial). Theories of the meaning or original function of the form other than as a hub cap (to which Willetts partly subscribed) include its identification with the *yü-hêng* of the *Shu Ching* for use with the *hsün-* or *hsüan-chi* disk as a sighting tube or telescope, Karlgren's *tsu* (phalliform) ancestral tablet container, Erkes' vagina, and Gieseler's household smoke-hole liner; Hansford noted the resemblance of the squarer forms of *tsung* to the cruciform royal tombs at Anyang and of both to the *ya-hsing* cartouche of earliest Chinese bronze inscriptions. The main element of the *tsung* graph has the meaning of ancestral shrine or temple. Without the jade radical it is frequent as the second of two characters in the posthumous titles of Emperors. All this suggests a connection with royal shrines.[80]

Known examples of *tsung* range in height from one to more than twenty inches. Many are undecorated, with plain or set-off corners only. A perforated ring with "rounded quadratic" outline obtained by Andersson in Kansu is taken by some as a late Neolithic or very early *tsung*.[81] A most interesting fragment with relief bar decoration was excavated recently from Erh-li-t'ou, believed by some to be the site of the earliest known Shang capital of Po or Western Po in northwestern Honan;[82] unfortunately it is too fragmentary to judge proportions and the photos too poor to read the decoration with assurance. A marble *tsung* with relief-line and mask decor was excavated from Anyang tomb 1004,[83] but its complex masks are Shang animal ones in strong relief rather than human ones in flat relief, and they face each other in pairs instead of being superimposed as in the *tsung* on pages 84 and 88. ROM *tsung* fragments from the Menzies (Anyang) collection show plastic and incised band decoration, one calcified piece having a combination of incised lines with nose-like corner elements. Thus, while most (jade) *tsung* from Shang sites are plain and squat or square in proportion, band and mask decor are known from, if not crystallized in, this period. The series of *tsung* most important for dating, however, is that with geometric or highly simplified human mask decor at the corners, and this begins only after the fall of the Shang.

Possibly the earliest masked *tsung* of this type is in the Freer Gallery of Art.[84] The spectacle-like eyes of its single corner-masks reflect those of the bronze masks found on the horses' heads in a Western Chou chariot burial at Chang-chia-p'o in Shensi; it also has a slightly more complex mouth-bar. An equally squat *tsung* with grooved ridges and two incised circles on each face suggestive of the mask type concerned reportedly came from the T'ai-p'ing-ch'ang Chou burial in Szechuan.[85] The single solid clue to the date of the crucial design is in the identity of the round-eyed, bar-mouthed *tsung* corner masks with those on Warring States sword-guards (often inlaid with turquoise).[86] Variants such as that on page 84, embellished with lightly scratched, geometric patterning, may be Warring States to Han in date. The earliest of the *tsung* with the geometric masks are likely to be Late Western Chou and not tall. The mature "stereotype" must date from the Warring States period with the swords while the style continued at least through Han and in regional variants. Long or tall *tsung* with

geometric masks, such as the (possibly archaistic) piece (page 88) called "Han or later," are unlikely to antedate the Late Eastern Chou period.

"With the red *chang* he renders homage to the region of the South." The *Chou Li*, its commentaries and other literature concerning ritual reveal some confusion as to the form of this jade. The *ya-chang* sceptre was identified by Laufer with the form illustrated from the ROM collection (pages 46 and 50—both fine, thin and probably of Latest Shang date). If this identification holds, the *chang* is a tanged form with side projections at the base of the blade. It is known with rounded, straight and slanting top edge. Characteristically it has a two-pronged tip, one side being slightly shorter than the other and frequently broken, whether intentionally or due to the extreme thinness of the upper end. One face of the sceptre is often abraded toward this thin tip to a concavity reminiscent of the backs of bones. Although Willetts would give it a dagger-axe prototype along with the *ko-kuei*, Hayashi has more reasonably suggested a bone ancestry.[87] Shang period carved bones are sufficiently impressive to have been carried as insignia or to have inspired jade imitations.

A stone *chang* with rounded top was excavated in Fukien Province.[88] Of the most elaborate types excavated, one from Erh-li-kang, Chêng Chou, Honan has two pairs of flaring lateral projections to either side of the juncture of blade and tang, instead of one pair.[89] The others, unearthed in Szechuan, have even more ornate blade-base and tang projections with notches joined by wire-fine, incised lines.[90] The dark *chang* (page 46) is a more typical or classical example of the form. Many *chang* in collections are of this dark stone although the only reported one is a stubby specimen from Kwangtung.[91] Few, if any, are red or even of the russet jade known from Eastern Chou *tsung*, plaques and earrings. The *chang* was probably carried vertically, attached to a shaft. How this was done and how it was used is not clear from literary sources (it is mentioned in the *Shu Ching*, *Shih Ching* and *Tso Chüan*) or from pictorial representations. As is the case, however, with other ritual jades mentioned in the *Chou Li*, the *chang* bone-derived sceptre is known in archaistic as well as archaic examples.

One last word from Willetts about the ritual jades: "They were not always made of nephrite, but nephrite was especially reserved for their manufacture. They were *conceived of* as made of jade."[92]

Personal Ornament

The instinct for personal adornment is timeless and universal. Second millennium (?)B.C. Neolithic burials in Shantung and Malaya revealed stone and nephrite bracelets still in place.[93] Already in late Neolithic times discoidal and cylindrical bracelets were worn by an elite, placed on the wrists probably in earliest youth, to judge from the smallness of the rings, and then buried with the dead. A slightly conical early bracelet may have developed regionally in China into a rare but interesting jade "cuff". There is a plain, calcified and broken "archer's wrist protector" of this family in the ROM collection (not illustrated). Of five or six published examples variously identified, one designated as a cuff from the Winthrop collection in the Fogg has a Middle Chou type of scale design at one edge.[94] The form is reminiscent of Mayan wrist ornaments. It is atypical for China and may belong mainly to the South although there are no excavated examples. It was possibly figured on the wrists of the figures clutched by the tigers of the famed bronze *yu* vessels in the Sumitomo and Cernuschi collections,[95] and on a small, silver, helmeted "barbarian" supposedly

from Chin-ts'un in the Fogg.[96] Some jade "bracelets" from China, such as the divided rings (page 42), may, as suggested, have been ear-hoops, worn within the earlobe in South China as they were in India. The green jade ring with openwork flange (page 72) is certainly an earring, unexpectedly comparable to a hammered and cut gold earspool from Chavín Peru.[97]

Most numerous and most typical for the archaic period in China is the slotted disk earring called (erroneously, as Hansford has noted[98]) *chüeh* (see page 71). It seems to have been current from Neolithic times through Han and into the Six Dynasties Period. The thin, fine, and open white ring with dragon decor on page 49 (Late Shang) and the coiled fat dragon-cylinder (page 53) may be early types. By Late Eastern Chou, on the evidence of a strikingly ornate belthook excavated at Ku-wei-ts'un, decorated *"chüeh"* were re-used as inlay, along with dragon pendants and other earlier jade forms, suggesting that at the centre, at least, they were no longer fashionable as earrings.[99] By Western Han times an enlarged slotted disk could be pictured as a chime on a lacquered coffin from Ch'ang-sha.[100] In the rich, Han period Shih-chai-shan site of Yünnan Province in south westernmost China, on the other hand, *"chüeh"* may still have been worn as earrings along with other kinds, for slotted disks of graduated size were excavated together there.[101] The chief archaeological evidence for the flourishing period of the slotted disk ear ornament is again from the Kuo Kingdom cemetery at Shang-ts'un-ling in Honan where 281 were excavated, most of them near the ears of the dead.[102] Unslotted disks flanking eyepieces in the burial mask assemblages uncovered at Chung-chou-lu, Loyang, may have represented this type of earring.[103] Bronze figures from early China suggest still other types of earrings, although we cannot know if these were ever made of jade. A Mongolian standing bronze attendant from Chin-ts'un and now in the Boston Museum of Fine Arts has linked rings in his ears, the upper apparently piercing the lobe,[104] while a shamanistic figure on a bronze *ko* excavated in Hupei has large arc-forms about the ears.[105] These may correspond to slim jade arcs recarved from rings, perforated at one end and given fish or dragon features. From Han times there are perforated spool-shaped ear-plugs to which further ornaments might be attached. Thus, in ancient China there was more than one kind of ear ornament, the variety suggesting regional as well as temporal differences, and some forms having relatives outside of China.

As late as the 7th century B.C. distinctions between ritual and ornamental, as well as other, forms of jade were by no means hard and fast. What the *Tso Chüan's* "royal *huang* of the Hsia" was, or the *Chou Li's* black *huang* for the North, is uncertain. Archaeology has made it clear that the disk segments we think of as *huang* functioned from Late Shang through the 8th or 7th centuries B.C. as neck ornaments.[106] Later they might be enlarged, decorated and suspended as chimes. Inverted in Eastern Chou and later times, the *huang* occurs frequently in *yü-p'ei,* Chinese girdle pendants. Small *pi* forms and rings were also incorporated into pendant designs, as well as beads and plaques of various kinds. The set on page 76 here was assembled from late 6th to 4th century jades in the collection after Kuo Pao-chün's reconstruction of a set excavated at Liu-li-ko.[107] Parts of another pendant design can be seen as they were discovered in the tomb of the Marquis Chao of Ts'ai at Shou Hsien, showing an Anhui arrangement of about 500 B.C.[108] From Warring States (Ch'u) tomb 2 at Hsin-yang, Honan, came a lacquer-painted wooden figurine still showing traces of a girdle pendant on the skirt.[109] The one possibly jade piece visible amongst four ribbon-bows, by means of which the parts were held in place, is a diagonally-grooved ring similar to a jade one excavated from the Ts'ai tomb. In T'ang times, as we know from *"geisha"* tomb figurines in the ROM,

pendants probably including jades were hung from the waist at the back as well as the front, although by then some pendants may have been linked by chains as well as ribbons. Bronze was clearly involved in the girdle pendant (?) set of jades shown on page 101. A later set with similar forms was illustrated in the Ch'ing Dynasty *Ku-yü t'u-p'u*.[110] The stunning "audio-visual", semi-magical jade pendants were never replaced by belthooks (see pages 77 and 78) and belt plaques, which also come under this general heading from Eastern Chou onward but which functioned differently.

Jade necklaces composed of scale-form and other beads like those on page 68 date from the Middle Chou period in China. In grave 1820 at Shang-ts'un-ling one such necklace may have been further embellished with a beaded tassel[111] not unlike the chimes with fish suspended from the crossbar of a Western Chou chariot excavated at Chang-chia-p'o.[112] Scale ornaments of bronze from the strapwork of the horses at Chang-chia-p'o are comparable with the scale beads on page 68.[113] It would seem that in later Western Chou times horse, chariot and man were similarly decorated. Shang to Han beads forming a sequence rather than a group are illustrated on pages 126-129 with rubbings of their designs. The series spans the archaic period. Other beads are small or undecorated and cannot be dated unless excavated.

A bowknot form of ornament, known from Shang bone and jade hairpins and comb tops,[114] is illustrated here by a Chou example (actually a pair) most interesting for its two-period decor, that on the back, datable to Late Western Chou, having been cut into to make the bowknot forms, then decorated in a different style on the front (page 69). The type lasted into Eastern Han times; a pair of jade bowknots was excavated from a Han tomb in North Korea.[115] The ornament appears in Han funerary reliefs attached to a bar-form headdress (one of several styles) worn by the Taoist goddess Hsi Wang Mu "Queen Mother of the West" described in the *Shan-hai-ching* as having a "high jade comb."[116] This is another instance of the long life of forms in China.

The scroll-cap-shaped hair fastener (minus its pin) on page 115 shows a different type of ornament in an example probably of Ming date. There are numerous Ch'ing jade hairpins in the ROM. They are of highly ornamental nature, many with heads carved in openwork and with earspoon finials. Although beautiful, they are the plentiful and late products of sophisticated tools and techniques and so of less interest, perhaps, than the earlier ornaments. This is true also of late buckles, nephrite and jadeite bracelets, thumb rings, and Manchu jade hatbars.

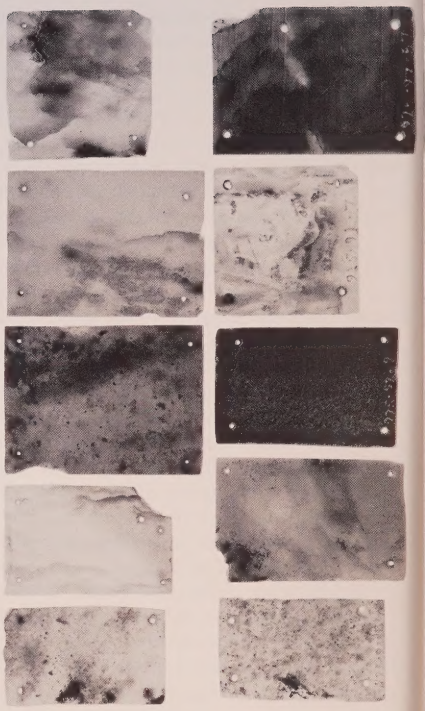
Burial Jades

The earliest (Neolithic and Shang) jades from China may or may not have had specific ceremonial functions. They were certainly buried with the dead. Laufer associated burial jades mainly with the Han Dynasty, from whose richer tombs sets of them have been excavated. In Willetts' later view virtually all of the earliest jades "were not originally meant for any other use than as burial objects."[117] Hansford's "dark millennium" has left the dating of many jades probably manufactured between the Han and Ch'ing Dynasties, or between the 3rd and 17th centuries, uncertain for want of archaeological finds.[118] The paucity of evidence from the tombs of this long period is no doubt due in part to grave-robbing. The gap must also reflect a change in attitude toward the dead, just as the decline of human sacrifice in Chou and the widespread use of pottery *ming-ch'i* ("spirit utensils" or grave substitutes for people, animals and things) in

Han indicate a changing psychology. Again in post-Han China, within a remarkable and unique formal continuity, changes did take place, and the "negative evidence" for jade is positive evidence for such change. While devotion continued, fear lessened, and the living in China as elsewhere gradually took priority over the dead. This is reflected in the quantity and quality of buried jade.

As power does not die but is passed on, so the feudal insignia of Early Chou may only rarely have been buried with the first holders. Burial jades, as distinct from jades buried, have to do with an early association of the stone with the preservation of life, and, failing that, of the body toward a kind of immortality. Not only was the material, nephrite, important for burial in the early period but so too were certain forms. One of these was the cicada, an insect of the Hemiptera class, with a long life cycle suggestive of transformation and resurrection. The larger, three-dimensional Shang stone cicadas of page 138 were probably not *han-yü*, "mouth" or "burial jades". The earliest of these excavated was a cluster of broken stone fragments (not clearly cicadas or parts of cicadas although the bits were carved) found in the mouth in Shan-ts'un-ling tomb 1839, 8th or early 7th century B.C.[119]

The earliest and most striking "sets" of burial jades (and jade-substitute stone) thus far discovered are those from three Eastern Chou burials at Chung-chou-lu, Loyang. From graves 1402, 1316 and 1723, dating from between the 6th and 4th centuries B.C., thin plaques of jade and stone were uncovered in arrangements suggesting human masks,[120] topped with broken symbolic forms and surrounded by irregularly rectangular or trapezoidal plaques. Out of context the almond-shaped eyepieces alone are recognizable forms—at first imperforate and perhaps inlaid in wood over the face, later perforated, like the other plaques, for fastening to some softer face covering or shroud. Eyebrows, noses, mouths and cheek plaques suggest animal forms like the tiger plaques of page 75 but not so clearly. The representation was in the arrangement so fortunately preserved at this Loyang site. The rectangular jade and stone plaques on pages 74 and 75 were probably also sewn to burial garments. The decorated and more carefully formed ones tend to be earlier, the plain ones later; both kinds were reported to have come from Chin-ts'un however, and some of the plain plaques are undoubtedly pre-Han.



Polished fronts and unpolished backs of plaques like those recently discovered in princely Western Han burial in Hopei which made up the jade burial garb of the dead (from ROM 925.52 series).

By Han times, as was first learned from the early excavation of tomb 9 at Lolang, site of a Han commandery in North Korea, the jade death mask may have been reduced to the "eyes" alone. There were, however, nose and body plugs; the mouth jade was no longer on the outside but on the inside, in a final, flat and stylized form of jade cicada. A jade seal and belthook might be included in a wealthy Han burial along with still mysterious pig-form bars (see page 94).[121] Like the cicadas the pigs were carved with a high degree of abstraction by Eastern Han times but were still recognizable as that crucial animal which consumed waste and produced food. If the pigs were placed under the armpits or held in the hands, as has been suggested, why were they perforated? If they were "shroud weights" why perforated below at the head and above in the tail? It is not known how they functioned in the tombs. From the numerous pottery, as well as the more striking jade, examples from Han graves, all we know is that they were necessary. In a rich Han burial at Pei-chuang, in Ting Hsien, Hopei Province, thirty-one carved jades were excavated which give similar evidence as Lolang for burial jades of Han in the North.[122] Particularly interesting from this burial (in the light of the more than one hundred rectangular jade plaques in the ROM with plain backs, polished faces, rough edges and corner perforations) were the 5,169 jade plaques found in this Hopei tomb suggested as belonging to the *yü-hsia* "jade shroud" or burial garment mentioned in the *Hou Han Shu*. More finely or evenly-finished jade plaques, perhaps not cut for burial, are known from later tombs; some were probably belt plaques, notably the dragon-decorated jade plaques from the royal tomb of Wang Chien (r. 907-918) in Szechuan.[123] Never again, however, was so much roughly-cut nephrite consigned to burial.

Another important form of burial jade may from the beginning (Late Eastern Chou to ?) of its interment have been the *hsi* jade seal. The Late Eastern Chou to Han examples here (pages 88 and 89) are very small. The seal on page 111 is very large, though not the largest in the collection. The dragon-topped stamp may have been made for the tomb of the Jên-tsung Emperor of the Ming Dynasty (r. 1425-6). The fact that the Emperor's posthumous name (Jên-tsung) is part of the legend on the cracked block, together with the fact that so many other large and late jade seals have cracked blocks and sometimes evidence of burning at one corner, may point to their manufacture specifically for burial.

Sculpture

If one can believe the reported Shansi Neolithic origin of the Nelson Gallery pigeon, with what has been well described as its Brancusi-like simplicity, then jade sculpture in the round begins in China before the use of bronze.[124] Most of the sculptures unearthed at Anyang were made of marble and were "bound forms"—i.e., not made for contemplation alone but as architectural or furniture parts or supports. Despite the refinement of their Shang body patterns they are block-like in form, with little sense of organic unity. Although a rare independent work, this is true as well of a jade (?) elephant from Anyang in the collection of the Academia Sinica, Taipei.[125] Small pieces with superb sculptural qualities, such as the white bird and tiger shown on page 60, are known from the late Shang and Chou periods, and two small jade riders were excavated in 1957 from an Eastern Chou burial at Loyang.[126] These are minor sculptures, however, designed for attachment of one kind or another. Sculpture in the round as an independent branch of the jade carver's art belongs in the main to Han and later times.

It was a Han workshop, in all likelihood, that produced the best known sculpture in the ROM collection, the water-buffalo of page 90. Reportedly from Anyang, it was published by Umehara in 1955 as Shang, and as "Neolithic Style" by Salmony in 1938. The squatting posture, however, the high shoulder with low-slung head, the rounding of forms as well as strong bevel-cutting, and the high polish have nothing in common with either the Nelson Gallery bird or the Anyang elephant. The representation of the animal's nature in this work is more sympathetic or better understood than even the relatively naturalistic early bronze rhinoceros vessel in the Brundage Collection in San Francisco (itself atypical for Shang, with its inscription rather than its style implying the Shang date accorded it).[127] The ears and haunches of the buffalo remind one in their bold, summary carving of the similar features of Han stone pigs. Finally, as noted in the Catalogue, some small soapstone and marble animal sculptures have recently been excavated from Western Han tombs, especially at Ch'ang-sha, which agree so well in feeling, regardless of subject, with the ROM water-buffalo that a revision of the traditional dating upward to Han is required.[128] It might be noted that there are (shroud appliqué?) plaques in the collection likely of Han date cut of similar stone.

A marbled dark tiger, carved with the same simple realism and published by Umehara as Shang, is also likely to be Han.[129] A knowledge of innate character was invested in these animal carvings, whether represented in tension or relaxation, according to type. This implies more observation or greater knowledge than the Shang carvers had. They worked one thousand years earlier, sought different ends and got different results.

Conventionalized forms like the robed and capped human figure toggles (pages 91 and 92) – not quite independent sculpture – occur in later Han art with the superbly stylized tongue cicadas from burial jade sets and the numerous jade and stone pigs. There is, in fact, a "family" resemblance between the robed Immortals with their wing-like sleeves and the cicadas so suggestive that one is tempted to call the former "cicada people".The likeness is one of the few guides to dating these figures, which are numerous in publications but not excavations, although human figures of jade have been unearthed from Late Eastern Chou and Han burials.

The compactness and strength of the off-white little bird of page 103, even with its hunched back and "wistful" tail, along with the clarity of its parts, set off from each other on the surface of the whole, suggested the T'ang date, for this sturdiness and clarity can be seen in T'ang forms from Buddhas to birds. By Sung times, as we see from the pebble sculpture of a Sika deer with its mate and the fungus of Immortality (page 105), a softness and more organic naturalism pervades jade sculpture, along with a more saving, and thus more intelligent, use of the precious material; the piece is still shy in detail, however. The hound (page 114) shows a superb and bold stylization based on a mastered naturalism which makes it seem later than Sung, although a Sung date is not out of the question. In the evolution of imaginary animal sculptures, like the chimera, the *fu* and *kylin* (pages 105, 112, and 118), the impulse, at least through Sung, toward illusionistic realism is in tension with the essentially unreal or composite character of the subject and the Chinese instinct for surface ornament.. When a concern for the organism occurs in this field a Sung date is likely.

A seriousness in jade sculpture is evident through Ming. By the eighteenth century, however, mastery is sufficient to allow the play of humour in both human and animal sculpture. In the nineteenth century colouristic effects inherent in the condition or nature of the stone were used with the highest sophistication. An example would be the boy in the leaf (page 118) where the

russet "skin" of the stone distinguishes leaf from body, or the famous cabbage of Taiwan's National Palace Museum collection where the more brilliant chromium greens of the jadeite coincide with the leafy parts of the vegetable, distinguishing them from the white of the stems.[130]

Vessels

The making of jade vessels is a branch of jade sculpture which reached its apogee in terms of skill in the 18th and 19th centuries of the Ch'ing Dynasty. Fluorite and other greenstone vessels and marble bowls, pedestalled dishes and vases were unearthed at Anyang from Late Shang times; nephrite vessels seem not to have been fashioned at this early date, however. The earliest and perhaps still most beautiful jade vessels from China are the eared oval cups and heart-shaped bowl published by Bishop White with the Chin-ts'un jades.[131] Cylindrical containers called *lien* with gilt bronze ornaments (possibly a beginning of Sarmatian or foreign taste affecting Chinese jade design) have also been attributed to Chin-ts'un,[132] and, on the evidence of a jade-inlaid gilt bronze belthook from Ku-wei-ts'un tomb 5, may well antedate Han. These and Han containers are prototypical either in form or decoration for vessels of more careful than flamboyant archaistic flavour believed to be of Sung date.[133]

Of the several jade cups attributed to Sung that shown on page 108 is one of the finest. Its modest form reflects Han cylindrical cups, its decoration, the animal bands set in fields of spiral-ended forms on Late Chou mirrors from the Yangtze state of Ch'u. The bail-handled *yu* bucket vase (page 109) is also relatively small, relatively conservative in its archaizing decor, and so probably pre-Ch'ing in date. It is a rarer type than the small tripod cup. The Ming bear-borne cylinder (page 117), although of a softer stone than jade, is interesting for its Han-based form and especially for the rendering in stone of a *guri* lacquer-like, slanting-cut decoration which, in turn, reflects a Sung and Yüan style of hammered metalwork.[134] Hansford cites an oval cup in the British Museum whose "Ulugh Beg Gūrgān" inscription dates it roughly between 1417 and 1449 and whose Chinese-influenced decor allows the possibility of Chinese make.[135] From China itself a jade cup with handle at one side and leaf in relief below was excavated from a Yüan burial dated 1320 at Wu Hsi, Kiangsu.[136] Both these pieces represent steps toward the achievement of the early organic beauty of the lotus cup (page 116) with its russet-tinged, wavy rim, coiled stem base and curious small beast-head in the leaf side.

Ch'ing Dynasty vessels of jade might be divided into five general types, only two of which are illustrated at this time: (1) frank and ornate archaistic vessels such as the spinach green *fang hu* or square vase (page 120); (2) shapes based on natural forms—of birds, animals and plants or combinations of these—of which the 19th century lotus dish of purest white nephrite (page 121) is a fine example (the stand is more beautiful than the dish and is included to show the heights reached in such jade accoutrements, for many vessels and sculptures come with stands not original to them or not as fine); (3) Indian or Moghul jade vessels of exotic style for China but nonetheless in vogue especially in the Ch'ien-lung reign of the 18th century; (4) plain bowls and dishes in strongest contrast to the latter in which the form, the polish and above all the pure and translucent stone is again the sole and highest delight—almost as it was in the beginning when the jade axes of Neolithic chieftains were the crown jewels of China; and (5) mixed decorative pieces with plant-and-animal or animal-and-vessel forms combined, sometimes decorated with openwork of astounding virtuosity and considerable beauty.

Style

A tentative analysis of two important patterns on early Chinese jades may show problems occurring when one moves from the broad outlines of a development anchored archaeologically in a period to look closely at particular examples of a style and try to date and place them. One of these diagnostic or period styles is the so-called *yang-wên* "male" or relief-line of the Shang, the other, the all-over spirals of Eastern Chou.

The *yang-wên* patterning of forms and outlining of features on the surfaces of Shang plaques, pendants and even of sculptures like the Taipei elephant is a hallmark of the Shang-Yin style. It is known from Shang marbles excavated from the city site and from tombs at Anyang;[137] it can be seen here in the mask fragment of black talc (page 49) delineating the distinctive "Shang eye" of some partly lost *t'ao-t'ieh* mask. Marble and talc, however, are softer than nephrite, which is what concerns us here.

The *raison d'être* for the double-line engraving of many Shang jade patterns, which might as clearly and much more easily be done with single lines, is almost certain to have been a concern for the *yang-wên* effect, perhaps initially an imitation of "Ordos" and Shang I linear patterning on bronzes.[138] It has been said, "after the fact", that the two *yin* "female" or incised lines make a *yang-wên*. But they don't. They effect a compromise. In order to understand it, the pattern might be divided into three types corresponding to three phases of work:

(1) Proto- or pseudo-*yang-wên*, illustrated here by the crested bird (page 52, far right), the first squatting profile figure plaque of page 53 and the headdress ornament (obverse) on page 69. The result in these Shang style jades is a facsimile of the *yang-wên* pattern. The facsimile may be early, regional, low quality or late.

(2) Semi-*yang-wên*, with the jade surface abraded away from the immediate vicinity only of the outer edges of the two incised lines, as in the smaller *t'ao-t'ieh* mask (page 52), the profile dragon with openwork, and the beautiful white dragon-ring (page 49). This, I believe, was the achievement of the Late Shang jade worker. A good example is the fine line-work in semi-relief on the ox *t'ao-t'ieh* mask (page 52).

(3) True *yang-wên*, illustrated from this collection by one piece only, the cock pendant (page 55). On this profile bird the jade surface was worked smoothly and completely away between clear, if broad, relief lines like those on Anyang marbles. However, the smoothly-curving refinement of the head of the creature and the distinctive angle of its rich tail, as well as the simplification and prominence of its single neck-scale or feather all point to a Chou, rather than a Shang, date. The most exquisite example of true *yang-wên* designs, a round-eyed mask from the Sonnenschein collection in Chicago,[139] may not be earlier than the "Shang revival" period of Eastern Chou. The fish/mask (page 53, far right) and the bowknot design (page 69) are indisputably Chou period, although in Shang style. Thus a line of development may proceed out of the period with which it is first and mainly associated. In any particular example a distinction must be made between the style and the date and place of manufacture. An extreme example, of course, would be the tiger (page 62), Late Shang style, modern make.

Jades with intricate, all-over patterns like those shown on pages 73, 74 and 75 with angles, spirals, lines, etc., carved individually, often with profile animal heads or "trace-elements" of these, represent the equivalent in jade of the Hsin-chêng and

Li-yü phases of Eastern Chou bronze design[140] and probably date from the later 6th to earlier 5th centuries B.C.[141] There are regional variations in this late Ch'un Ch'iu period and also higher and lower quality works of jade and jade-substitute stone, as can be seen from the plaques on pages 74 and 75. The dragon plaque (page 73) was carved densely on both faces with spiral and comma-like forms comparable with jade designs known from the tomb of the Marquis Chao of Ts'ai at Shou Hsien (d. 491 B.C.).[142] It is transitional to the Late Eastern Chou or Warring States spiral pattern.

The spirals would seem to reflect in jade the stamped "comma" or "feather-and-curl" patterns on Warring States bronzes, especially Ch'u kingdom mirrors.[143] The success of the design was due in part to the technical discovery of a way to "mass produce" spirals at regular intervals over an entire jade surface by preliminary carving in a criss-crossing network of grooves resembling a rush or basketry pattern. This isolated mounds, then further carved to make spirals in relief, finely formed and polished. In earlier examples like the sword pommel (page 84) and great *pi* fragment (page 83) and the beautiful olive-green *huang* arc (page 85, centre), care was taken not only with the spirals themselves but also to smooth away from their background almost all trace of the preliminary grid. Later, as in the third *huang* arc on page 85, the border is flat instead of raised, the mounds are low, and the spirals merely incised on them, while much of the "basketry" work was left visible. It is a lower quality piece than the arc above it but it is also later, for while this phase may have begun in the late 4th or 3rd centuries B.C., examples have been excavated from Han tombs.[144] At the same time, Late Warring States to Han, high-quality jades like the *pi* disk pendant (page 86) were produced in which the originally incidental rush or basketry grid emerged as the dominant design;[145] there isn't a trace of a spiral on the faceted small mounds of this low-bordered *pi*. The next step, which belongs to the Han period, was to refine these plain mounds into smooth little bumps (which in post-Han pieces often look like warts), once more eliminating the basketry background. Thus, perhaps, a design ran its course from around 500 B.C. to 200 A.D. After this all forms, but particularly the "rush" and "wart" or "grain" types, were repeated (often on the backs of *pi* with animal decorations in relief on their faces) until modern times. If this dating proves valid and the identification of the smoother bumps with the *ku* grain pattern is correct, a literary passage may be dated by art rather than the reverse, and the *Chou Li* section citing rush and grain patterns together must be Han, or later than the 4th to 3rd centuries B.C.

Notes

1. Currelly, 1956, p. 249.

2. Sivin, 1968, pp. 169 and 211.

3. See Hansford, 1968, p. 81.

4. I myself saw a *pi* and a *tsung* in the Archaeological Museum in Teheran—no note as to their being imports from China, which is, of course, possible.

5. See neck projections on animals decorating a Siberian bronze mirror in the Hermitage (Borovka, 1928, pl. 41) and the dense, even spirals on Han lacquers made in Szechuan.

6. Salmony, 1938, pl. LI:5 does show similarities, but has clearer Chinese connections.

7. In Dr. Hsio-yen Shih's opinion it is a fake. She is probably right.

8. See Salmony, 1952, pl. XXXVI:2 and Umehara, 1955, pl. LXXIV.

9. Von den Steinen, 1969, B-X, passim.

10. See the Heeramaneck Collection Catalogue, 1966, nos. 221, 222, 227. Also Hansford, 1969, pp. 203 ff.

11. Hansford, 1968, p. 97.

12. *Encyclopaedia Britannica*, 14th ed., vol. XII, p. 862.

13. I am indebted to Dr. Andrew Wyner for pointing out the new methods of testing to me.

14. See Hansford, 1968, p. 33.

15. Hansford, 1968, p. 48; Willetts, I, p. 61 allows the possibility of prior knowledge and use.

16. Haloun, 1937, pp. 306-18.

17. Gure, 1951, p. 119 fig. 5.

18. Hansford, 1950, pp. 70-72.

19. Willetts, 1958, I, p. 56.

20. String sawing by Olmec, Maya and especially Costa Rican ancient jade-workers is cited by Easby, 1968, pp. 24-5.

21. White, 1934, no. 307; and Umehara, 1955, pls. 59 and 61 (lower).

22. Hansford, 1968, p. 51.

23. White, 1934, p. 3.

24. *WW*, 1959, 10, p. 78:5.

25. Hansford, 1968, pl. 9 AB.

26. *Shih-chai-shan* Monograph, pls. 66, 67 and 81; see also jade T-section and cylindrical pieces in Pls. 112:6-7 and 113:2.

27. *Ibid*, pls. 104:2 and 113:2.

28. Cf. gold earspool in Wardwell, 1968, first colour plate. From Peru.

29. *Shih-chai-shan* Monograph, pl. 69:3.

30. See Willetts, 1958, I, p. 70.

31. Hayashi, 1969, p. 267 fig. 55:7 and p. 269.

32. Michel, 1950, pp. 156-9; Willetts, 1958, I, pp. 94-8; Hansford, 1968, pp. 65-8; etc.

33. Biot translation, with commentaries, 1851.

34. Such as that excavated in 1959 at Pei-chuang, Ting Hsien, Hopei (see Hansford, 1968, pl. 61:4 or *KKHP*, 1964, 2, pl. 20:2). For the relevant *Chou Li* passage see Biot, I, p. 432.

35. Willetts, 1965, p. 45 was quoted also by Hansford, 1968, p. 57.

36. See Hansford, 1968, p. 77.

37. In his *Chinese Pictorial Bronzes of the Late Chou Period*, Ascona, 1968.

38. See Laufer, 1912, pp. 97 and 110, figs. 31 and 39—the Wu Liang Tzu *kuei* and *pi* reproduced in this and other works from the *Chin-Shih-So;* also Nagahiro, 1965.

39. Willetts, 1968, I, p. 68.

40. Umehara, 1964, pls. 144-5.

41. I believe this was written by René Grousset but, although it has remained in my mind, I am unable to trace it at the moment.

42. Yonezawa and others, 1963, p. 54, no. 61.

43. See especially the Kunz axe in the American Museum of Natural History, reportedly from Oaxaca and possibly contemporary with Chou, and also the axe-god pendants from Costa Rica (Stirling in Lothrop, 1961).

44. See Willetts, 1958, I, pp. 78-81.

45. Mizuno, 1959, p. 68 fig. 70:d.

46. See *CCL* Monograph, pl. 66:7. Mrs. Barbara Stephen, who heads the bronze weapons study undertaken here, stated this opinion recently in a seminar.

47. Umehara, 1964, pl. 139, upper right.

48. As at Chang-chia-p'o—see *Fêng-hsi* Report, pp. 144-5 (drawings).

49. See Hansford, 1968, pl. 6.

50. Biot, I, pp. 434-5; Laufer, 1912, p. 120.

51. See Willetts, 1958, I, p. 100.

51. So-called by the 2nd century commentator Chêng Hsüan (see Willetts, 1958, p. 91).

53. Willetts, 1958, pp. 91-3.

54. Palmgren, 1934, pl. 13:2.

55. Hansford, 1968, p. 63.

56. Frankfort, 1958, pls. 65 (top of Hammurabi "code stele"), 73A, etc.

57. See Willets, 1965, pp. 56-7.

58. *WW*, 1959, 10, p. 78:5.

59. *STL* Monograph, pl. 42:1—*in situ*, tomb 1704.

60. Cahill, 1960, pl. 48—Portrait of Ch'an master Wu-chun.

61. See *Ch'ang-sha* Report, pl. 7:2.

62. See arrangement in 4th stage tomb 1316, *CCL* Monograph, pl. 62:2.

63. *SKT* 6, fig. 151; *Hui Hsien* Report, pl. 53:1.

64. *JWCBRS*, VI, fig. 1 (drawing).

65. See *Ch'ang-sha* Report, pls. 5-6.

66. See Hansford, 1968, pl. 25.

67. Waterbury, 1942, pl. XVII:B.

68. Nagahiro, 1965, p. 57 fig. 100 (Szechuan, Pillar of Shen), pp. 144-5 (I-nan), etc.

69. Hayashi, 1969, p. 225 fig. 33—Lung Shan Neolithic *huang*.

70. Umehara, 1964, pl. 13:1—*in situ* and pl. 158:1.

71. *STL* Monograph, pl. 42:1 tomb 1704.

72. See Reconstruction drawing of pendant design

from Liu-li-ko in Hansford, 1968, p. 104 fig. 5 (after Kuo Pao-chün).

73. *WW*, 1963, 2, 1st colour plate.

74. Willetts, 1958, p. 70.

75. Hansford, 1968, p. 62.

76. *STL* Monograph, pl. 3:1-3.

77. See note 62.

78. Laufer, 1912, p. 99.

79. See Hansford, 1968, p. 77.

80. Willetts, 1958, pp. 98-105 and Hansford, 1968, 63-70.

81. Andersson, 1943, pl. 71:4.

82. See Soper, 1966, fig. 9:10 (after *Kaogu*).

83. *1004*, pl. XXXIII; 1 *(in situ)*, and pls. LIII: 4 (photo) and LVI: 1 (drawing).

84. Salmony, 1938, pl. XXVIII:1 — 1¾" high.

85. Graham, 1933-4, pl. op. p. 128.

86. See *SKT* 6, pl. 266.

87. Hayashi, 1969, p. 267 fig. 55:7 and p. 269.

88. *Ibid.*, p. 267 fig. 55:2.

89. *Ibid.*, p. 267 fig. 55:1 or *WW*, 1966, 1, p. 58.

90. Dye, 1930-31, pls. op. pp. 102 and 104.

91. Hayashi, 1969, p. 267 fig. 55:3.

92. Willetts, 1958, p. 58.

93. See Hansford, 1968, pl. 9 AB.

94. Fogg Art Museum, pl. 14.

95. See Mizuno, 1959, pl. 69 (Sumitomo).

96. *Ibid*, pl. 155.

97. Wardwell, 1968, first colour plate.

98. Hansford, 1968, pp. 78-9.

99. Hansford, 1968, pl. 31 and *Hui Hsien* Report, p. 104 fig. 123 (drawings).

100. *WW*, 1963, 2, 1st colour plate (above).

101. *KKHP*, 1956, 1 pl. 7:7 — stone, from section A, tomb 1.

102. *STL* Monograph, pl. 26:1, 29, 42:1, etc.

103. "Archaeology in New China", pl. 73.

104. Mizuno, 1959, pl. 156.

105. See *WW*, 1963, 1, p. 64 fig. 1.

106. See Anyang and Shang-ts'un-ling evidence cited.

107. Hansford, 1968, p. 104 fig. 5 — drawing after Kuo Pao-chün.

108. *Ts'ai-hou mu* Monograph, pl. 2:1.

109. Yonezawa and others, 1963, colour pl. 20.

110. See Laufer, 1912, p. 198 fig. 95.

111. *STL* Monograph, colour pl. 2.

112. See n. 47.

113. *Fêng-hsi* Monograph, pl. 104:2.

114. Umehara, 1964, pl. 140:6 jade comb top and p. 86 fig. 38 right (drawing).

115. Umehara, 1955, pl. 99: above — from Han tomb, North Korea.

116. See Han "2nd century A.D." stone relief, with Hsi Wang Mu enthroned above in paradise scene, in Fujii Yūrinkan, Kyōto (SBZ 13, pl. 40).

117. Willetts, 1958, p. 68.

118. Hansford, 1968, p. 19; see also "Han to Ch'ing", pp. 86-98.

119. *STL* Monograph, pl. 28:7 from tomb 1839.

120. *CCL* Monograph, pls. 81:1 (tomb 1402 stone mask fragment in assumed order), pl. 61 (tomb 1316 mask as discovered), and pl. 78:2 (tomb 1723 mask "reconstructed").

121. See Umehara, 1955, pl. LXXXIV; also *KKHP*, 1964, 2, pls. 10-12.

122. See *KKHP*, 1964, 2 or Hansford, 1968, p. 107 fig. 6.

123. Fêng, 1964, pls. 33-5.

124. Willetts, 1958, pl. 7A and elsewhere — the creature is much published.

125. Hansford, 1968, pl. 6 cf. blocky marbles from Anyang royal tombs such as *1001*, pls. LXXI, LXXVI, etc.

126. *KK*, 1959, 12, pl. 3:5-6 and p. 657 fig. 4:1-2.

127. See Mizuno, 1959, pls. 70-71.

128. See *KK*, 1957, 4, pl. II: 3 upper right.

129. Umehara, 1964, pl. 137:4.

130. NPM, 1969, pl. 45.

131. White, 1934, pl. CXXIII:307 and p. 31 with mention of a small round jade cup with one handle and two *yü-shang* or winged oval cups.

132. See beautiful example in Winthrop collection, Fogg Art Museum, in Umehara, 1955, pl. LXI.

133. See OCS, *Arts of Sung*, pl. 91; Gure, 1964, pl. 31:4, etc.

134. See *WW*, 1961, 11, p. 9 pl. 6, a silver vase excavated with a Sung hoard at Tzê Yang, Szechuan.

135. Hansford, 1968, pl. 79.

136. *WW*, 1964, 12, p. 58 fig. 17.

137. See *1001*, pl. 85; *1002*, pl. 24; *1003*, pl. 21; *1004*, pl. 53 (the *tsung*).

138. See Loehr, 1968, Brundage *chia* no. 4 "Shang, Style I".

139. Salmony, 1952, pl. 36:2 and elsewhere.

140. See Loehr, 1968, Stanford *tui* no. 62 (c. 600 B.C.) and for proto and fuller Li-yü style, Toronto *ting* no. 63 (6th century B.C.) and Mayer *ting* no. 64 (c. 500 B.C.).

141. *Hui Hsien* Report.

142. *T'sai-hou-mu* Monograph, pl. 28:21 and pl. 105:12-13 (rubbings).

143. Karlgren, 1941, pls. 9-13 (mirrors) and Loehr, 1968, Copenhagen *pien-hu* no. 65.

144. Umehara & Fujita, 1947-, pl. 64 jade *pi* from tomb 9, Lolang, Korea; *Shih-chai-shan* Report, pl. 112 (fragments), and *KK*, 1957, 1, pl. 9:4 from a Han tomb in Hunan.

145. *Ch'ang-sha* Report, pls. 34:1 and 45:2 jade *pi* from Warring States and Western Han tombs, respectively; see also jade and glass examples from later Western Han tombs at Ch'ang-sha in pl. 92.

146. *WW*, 1964, 12, pl. 2:4.

U.S.S.R. (Siberia)
Lake Baikal
Peking
Hopei
Anyang
Shantung
Yellow River
Shensi
Shansi
Chinese Turkestan
Yarkand
Khotan
Changan
Loyang
Kiangsu
Kansu
Honan
Anhwei
Shanghai
Hupei
Yangtze River
Szechwan
Chekiang
Changsha
Hunan
Kiangsi
Fukien
Taiwan
Tawmaw
Kwangtung
Mogaung
Kweichow
Canton
Yünnan
Kwangsi
Burma
India
Rangoon

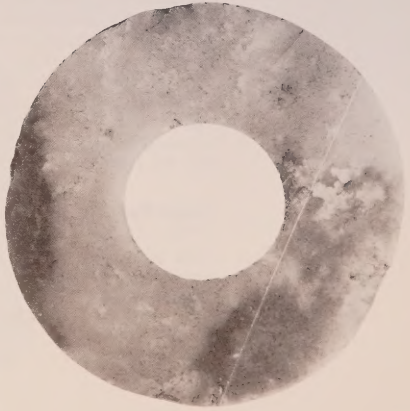
Yü-p'ei or girdle pendant assembled from late 6th to 4th century jades. (page 76)

Axe (932.16.231). L. 7 1/4" (18.5 cm.). Late Neolithic

Dark greenstone axe of "Northern rounded" type, one of two similar pieces acquired by Bishop White in China. Slightly concave and pitted face shown has more white veining than the reverse. In Neolithic fashion the effective parts of the axe – the sides and the crescent-shaped cutting edge – were finely finished, while the encrusted and now broken butt was left pitted. Marks of the biconical boring of the perforation left visible. The axe serves to show an important Neolithic type of jade although the stone is serpentine. See unperforated nephrite example reportedly from Hsün Hsien, Honan, illustrated by Willetts, 1958, I, Pl. 1B.

Pi Disk, 2 views (960.241.7). Max. Diam. 3 7/8" (9.9 cm.). Late Neolithic

Semi-translucent, light green jade clouded with white and with brown at two sides. Uneven slice and form. Low polish leaves pitting, especially about outer edge. Strongly slanting, conical, ridged perforation. On the reverse face are two straight saw-scars, one short at edge, the other straight across beside the perforation. Comparable jade *pi* with scarred conical perforation excavated from Neolithic burial in Shantung (KKHP, 4, 1959, p. 27 fig. 11:1). Another similar specimen now in the West China Union University Museum and reportedly from Shensi is illustrated in Chêng Tê-k'un's *Prehistoric China*, Pl. XV:1.



Bracelet (918.7.137). Diam. 3 7/16" (8.7 cm.), H. 1 1/16" (2.7 cm.), Th. 5/16" (1.2 cm.). ? Late Neolithic – Western Chou

Translucent patches of pale greenish jade show through crackled light brown "skin". Plain, thick-walled cylinder shows even cutting and "polish". One edge slightly chipped. A timeless piece in its simplicity. There are quite similar Yang Shao Neolithic pottery rings. Jade examples from Lung Shan Neolithic graves in Shantung are comparable but rougher on the interior and conical rather than cylindrical in form (cf. *SKT* 5, p. 64 fig. 111).

Ridged Ring (930.21.277). Diam. 2 13/16" (7.2 cm), H. 7/8" (2.2 cm.). ? Shang

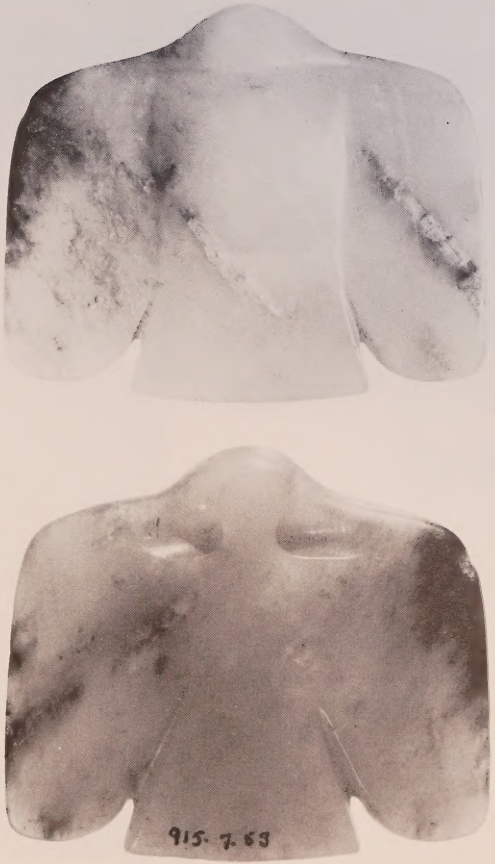
Faintly translucent ivory coloured stone with opaque grey-green shadows. Inner wall slightly convex, outside abraded to concavity above and below uneven encircling midrib. Incrustations of earth and red pigment. Reportedly from Loyang but another opinion states "Anyang" in the record. Origin and function unknown. Small for a bracelet unless placed on the wrist of a child. Possibly an earring of South Asian type. A section of such a divided ring was purchased reportedly from the Chou burial at T'ai P'ing Ch'ang, Szechuan, for the West China Union University Museum (see *JWCBRS* VI, 1934, Pl. opposite p. 120, right). The Shih-chai-shan site in Yünnan yielded comparable rings both of gold and jade (Monograph, Pls. 104:2 and 113:2).

Ridged Ring (930.21.276). Diam. 2 5/8" (6.7 cm.), H. 13/16" (2.1 cm.). ? Shang

Same as above except for size and colour, which in this instance is the soft (opaque) grey-green of Korean celadon.

Bird Pendant (915.7.53). Max. Dimension 2 5/16" (5.9 cm.). Neolithic Style, Western Chou period

Light green, semi-translucent jade, veined with brown and with a brown shadow at one wing curve. Thick head and centre of body, thinning toward the outspread wing edges. Roughly rectangular form with only head, body and wing divisions indicated. Slanting conical perforations meet under head on back for suspension cord. The only details are the faint relief lines to either side of the head and those running down the centre of each wing. This type of pendant is usually called "Neolithic style," possibly due to similarities with the famed and presumably Neolithic pigeon from Shansi in the Nelson Gallery, Kansas City. This example, however, is more likely a late Neolithic-*cum*-Shang survival piece of Western Chou date from South China. Comparable bird toggle of light green jade from the Seligman collection is illustrated by Hansford, 1968 in his Pl. 1 BC; cf. the Nelson Gallery's green jade pigeon (earlier and different except for the rounded generalization of form) above it in 1 A.



Axe (928.12.36). L. 5 7/8" (15 cm.), W. 5 1/4" (13.4 cm.). Early Shang

Beautiful, faintly translucent, blue-green stone with amber and cream inclusions and dark brown at upper edge and on one set of lateral "teeth." Low polish encompasses the rounded edges of the slightly splayed sides. Cutting edge bevelling smoothed but visible. Roughly square shape fashioned from relatively thin yet strong slab. Large conical perforation about 1/2" in from centre of butt. Considerable care evidenced in carving of lateral "teeth" – three to a side with two smaller notched projections interspersed. Superb piece, one of several purchased by Bishop White from the collection of Wu Ta-ch'êng. It has been tested and is nephrite. Cf. trapezoidal axes of stone and jade of the Lung Shan phase of the Chinese Neolithic in Hayashi, 1969, p. 240 fig. 42:1 and p. 238 fig. 40:1. But these appear to lack the lateral "teeth" whose refinement of form suggests a slightly later or Bronze Age date.

Tsung (930 x 146.4). Ht. 3" (7.6 cm.), Diam. of cylinder 3 1/8" (7.9 cm.). Late Shang (Anyang)

Streaked green and whitish opaque stone with amber veins and buff-to-amber tones over much of the surface. Low polish leaves pitting and traces of abrasion. Roughly square proportions. Uneven cylinder has a slightly convex but polished inner wall. Plain projecting corners are set off from the outer wall toward an "applied" effect. The whole was unevenly centred and squared, so that it appears slightly lozenge-shaped when viewed from above. Comparable example excavated from tomb 163 at Ta-ssŭ-k'ung-ts'un, Anyang (KKHP, 9, 1955, Pl. 18:2 or Hayashi, 1969, p. 288 fig. 66:5).

Tsung (927.19.146). Ht. 1 3/8" (3.4 cm.), W. 2 1/8" (5.4 cm.). Late Shang (Anyang Period)

Light green jade mottled with amber and brown and showing buff or calcified areas. Low but smooth polish leaves pitting only about edges and corners. The form is squat with only slightly projecting cylinder ends. Broad "cruciform" walls flat and smooth. A slightly convex inner wall suggests a smoothed biconical bore. Traces of earth. Among the Menzies fragments from Anyang is one of a calcified or burned *tsung* sharper in form but comparable with this in type. Cf. also broken *tsung* forms from royal tombs at Anyang (1001, Pl. CXX:9, 10, reconstruction drawings).

Tsung (960.241.19). Ht. 7/8" (2.2 cm.), W. 1 5/16" (3.3 cm.). Late Shang (Anyang Period)

A miniature of light green translucent jade with some white clouding. Polish leaves minute surface pitting on the outside while the inner wall is even and smooth but unpolished. Small squat form is fragile and uneven. Central cylinder uneven on the outside. One flat outer wall gives the "cruciform" effect, two others are simply rectangular, while the fourth shows a lightly abraded vertical depression down its centre. Saw-cut diagonals across corners visible from above. Incrustations of earth and (probably modern) orange powder inside tube.

Chisel-Kuei Tablet (927.19.269). L. 14" (35.6 cm.).
Shang

Dark (grey-green and black) stone shaped into elongated trapezoidal tablet. Conical perforation drilled from more mottled or reverse face for hafting or suspension about 3" in from butt. Slanting cutting edge bevelled from one side only. Low polish left surface and butt-end pitting, one straight saw scar. Chêng Tê-k'un (*Prehistoric China*, Pl. XII: 1) shows Honan chisel with one bevelled edge and conical perforation.

Chang Sceptre (927.19.37). L. 13 3/4" (34.9 cm.).
Late Shang

Near-black jade, olive-green at very thin top end, of which only one point remains due to breakage in antiquity. Low polish. Thin long form is convex on obverse, slightly concave toward tip on reverse (which is pitted at one side and tang). Base of "blade" marked by squared, slightly back-slanting or hooked lateral projections (one broken), between which a conical perforation was drilled from the obverse. Much simpler, especially in its side projections, than *chang* excavated at Erh-li-kang, Chêng Chou (WW, 1966, 1, p. 58) or the specimens from Chengtu region, Szechuan, in West China Union University Museum (cf. *JWCBRS* for 1930-31, Pl. opposite p. 102). Comparable sceptres in Winthrop Bequest to the Fogg Art Museum (Umehara, 1956, Pl. 37, left) and from Eumorfopoulos collection in British Museum (Jenyns, 1951, Pl. XIV left).

Ko Dagger-Axe (934.17.119). L. 12 7/8" (32.6 cm.).
Shang (Anyang Period)
Published: White, *Bronze Culture of Ancient China*, Pl. XVII.A and p. 30

Buff-coloured jade, gold and brown staining and traces of calcification. Translucent only at thinnest edges. Fine, low polish. Long and slender, both faces of the down-curving blade showing midrib and bevelled edges. Midrib continues through the tang, which widens slightly toward the butt end; the tang

side bevels are not continuous with blade bevels. Juncture of tang and blade marked by symmetrical incutting. To either side of the blade head are four "teeth," the two middle ones on each side divided by brief, incised lines. Neatly cylindrical perforation at the base of the tang on the midrib. The straight butt edge of the tang is bevelled to a (pitted) ridge. Incrustations of earth and red pigment. This, with a similar but plainer ivory jade *ko*, was acquired by Bishop White in 1933 along with bronzes from the "Elephant Tomb" set. (Blade broken and rejoined.)

T-section Ring (932.16.23). Diam. 3 1/4" (8.3 cm.). Shang (?)

Faintly translucent, ivory-coloured jade clouded with grey at side and about perimeter. Low polish leaves faint traces of abrasion and surface cracks. Projecting centre wall unevenly indented at one point and slightly convex on the inside, suggesting a smoothed biconical perforation. Traces of earth and red pigment. Reportedly from Northern Honan. Cf. T-section (?) disk at right of occupant of Shantung Neolithic burial (SKT 5, p. 66 fig. 113); clearly T-section ring on right wrist of skeleton from Malayan Neolithic grave at Gua Cha (Hansford, 1968, Pl. 9,AB); calcified piece from Anyang (Hansford's Pl. 9C, as well as ridged disks from such royal tombs at Anyang as 1217, 1001, 1004, etc.); broken, dark T-section ring from T'ai P'ing Ch'ang, Szechuan, and calcified one from Chengtu region (*JWCBRS*, VI, Pl. op. p. 120 and IV, Pl. op. p. 102); T-section rings known and worn as bracelets on right wrists of dancers and musicians from Shih-chai-shan in Yünnan (Monograph, Pl. 112:7 and Pls. 66, 67, 81). Most of these examples are stronger or broader than the delicate ROM piece, which is difficult to date with confidence.

Arrowhead (947.31.22B). L. 1 15/16" (4.9 cm.). Shang

Grey-green jade, translucent only at thinnest edges; almost completely calcified, especially at one side. Smooth low polish. Triangular form with bevelled edges and grooved centre on both faces. Triangle has slightly arched base. Incrustations of earth and red pigment. Cf. jade arrowheads from Yin tomb 141 at Liu-li-ko (*Hui Hsien* Report, Pl. 16:24-5).

Spearhead (934.17.118). L. 4 3/16" (10.6 cm.). Late Shang

Fine and thin but opaque buff-coloured blade. Simple leaf shape rising to low midrib on both faces. Edges bevelled to considerable sharpness. Low polish leaves faintest traces of abrasion and scratching especially at base of blade which is chipped across one face. Also visible on lower part is a V-shaped dark brown stain probably from the mounting of the blade in a lost socket, perhaps of turquoise-inlaid bronze as in several published examples. Neat, if slightly slanting, biconical perforation above the stain and on the midrib near the base of the blade. Traces of earth, red pigment and woven material. Reportedly from the "Elephant Tomb" near Anyang, (cf. White, *Bronze Culture*, p. 31). To see how a similar jade blade was mounted, often in a turquoise-inlaid bronze socket, see Umehara, 1964, p. 34 fig. 10 (drawing); Willetts, 1958, I, Pl. 4A (photo) and other works on Bronze Age China showing mounted jade axes, sickles, halberds and spearheads.

Four Arrowheads (947.31.22 C-E). L. of longest 2 5/16" (5.8 cm.). Late Shang.

Originally grey-green jade now almost wholly calcified to an opaque, mottled, buff and tan. Longer triangular form than the above but with similarly bevelled edges and grooved centres. Higher and more pointed lower arch. Traces of earth and red pigment.

Open Ring with Dragon Design (931.13.359). Diam. 3 1/4" (8.2 cm.). Late Shang (Anyang Period)

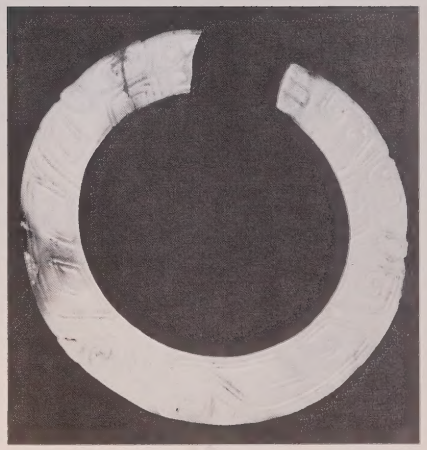
Very thin ring of translucent white jade with some dark clouding and dark-edged buff or calcified areas where ring was slotted. Thicker at inner than at outer edge, which is sharp and in-cut slightly for details of the dragons' heads. Both faces polished and finely carved in (low) thread-relief style with a pair of profile dragons whose heads confront across what must originally have been an narrower slit in the disk. (One head is broken off beyond the eye, and the ring is rejoined from three pieces.) Features include the Shang complex eye, jaw-spirals, "bottle" horns, curling tails and angular spiral body decoration. Traces of earth and red pigment. Reportedly from Anyang. Comparable designs on pendant in Swedish Royal collection (Hansford, 1968, Pl. 58) and Eguchi slotted dragon-ring (Umehara, 1956, Pl. LXXX: above). A pottery disk with a roughly incised, two-dragon design was excavated from royal tomb 1217 at Hou-chia-chuang, Anyang (*1217* Monograph, Pl. CIII:1).

Fragment of T'ao-T'ieh Mask (949 x 142). L. 1 15/16" (4.9 cm.), Th. 7/8" (2.2 cm.). Late Shang

Fragmentary frontal animal mask of black talc, broken at sides and bottom, smoothed although pitted above and at rear. Thick piece rises to central midrib in front which now shows *t'ao-t'ieh* eyes only. These, however, have been carved out of the soft substance in finest Late Shang style.

Tadpole (947.32.3). L. 4 1/2" (11.4 cm.), W. 2" (5.1 cm.). Late Shang (Anyang Period)

Calcified, whitish stone plaque with chalky edges carved with strictest symmetry in the form of a tadpole or salamander seen from above. Two pairs of legs are angled out and forward from spiralled joints. Rounded-rectangular eyes, brows, arms, legs and wing or feather-like patterns on body carved in the (low) thread-line relief typical of Shang. The thin plaque shows a gentle longitudinal midrib both on the decorated back and the plain underside, suggesting re-carving from a *ko* dagger-axe blade of Shang type. Incrustations of earth and red pigment. Right foreleg and part of nose broken off while tip of tail has been rejoined. Bishop White's note of an Anyang origin is supported by the discovery in Shang royal tomb 1001 of a creature almost identical, except that it appears to have the design on both faces (cf. *1001*, II, Pl. XCVIV:2).



Chang Sceptre (930 x 146.9). L. 9 3/16" (23.4 cm.). Late Shang

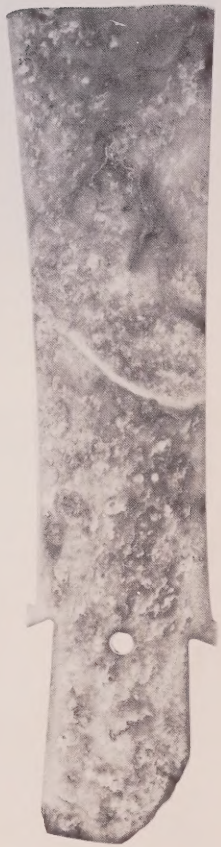
Finely mottled blue-grey, gold, buff and brown jade (back is more evenly dark brown in colouring), faintly translucent where thinnest. Short and uncomplicated but fine, thin piece. Unusually complete and straight upper edge is sharp. Uneven conical perforation drilled from front between flaring lateral projections placed on a slightly slanting axis. Tang widens toward the slanting and diagonally broken butt end. Otherwise finely finished edges. Back brown, plain, slightly concave and pitted. Stone similar on grey side to Menzies fragment 960.241.28 from Anyang. Closest to this example is a jade "*kuei*" called Early Western Chou in SKT 6, p. 86 fig. 230, although it has the sunken arch between the two points of the tip and a second perforation near the butt edge of the tang.

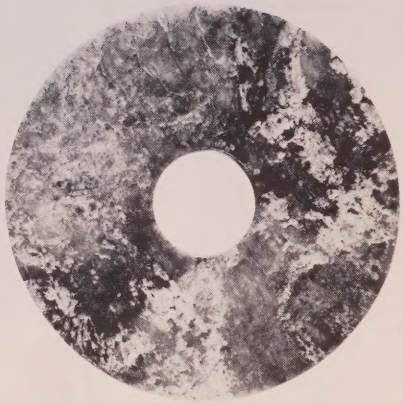
Pi Disk (915.7.65). Diam. 4 5/16" (12.5 cm.). Late Shang

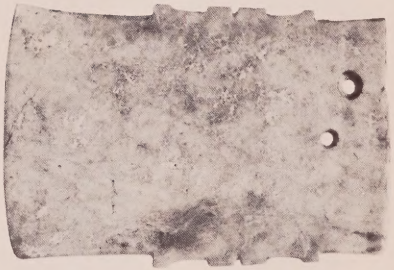
Like the *chang* sceptre and the Anyang fragment mentioned in connection with it, this fine and even although plain ritual disk is of mottled blue-grey and tan jade with buff clouding (calcification ?) and dark veining. Both inner and outer "walls" are vertical and polished. The bevelled edges of the relatively small central perforation perhaps indicate boring from two sides. High, even polish on both faces.

Axe (960 x 289.14). L. 3 1/16" (7.8 cm.). Late Shang (Anyang)

Light green jade mottled and veined with tan, almost wholly calcified. Pitted but relatively straight butt. Very slightly flaring sides. Fine but not sharp cutting edge. Two biconical perforations at butt end, the smaller one centred, the larger one nearer to corner and edge. Fine lateral processes or "flanges" consist of notched central and single outer projections carved with more flare than the fine but tight little "teeth" on the beautiful square axe (page 44). Axes with such flanges have now been published from Late Shang royal tombs 1001 (Pl. 65:8) and 1004 (Pl. 48:6).







Hare Pendant (960.241.123). L. 1" (2.5 cm.). Late Shang (Anyang Period)

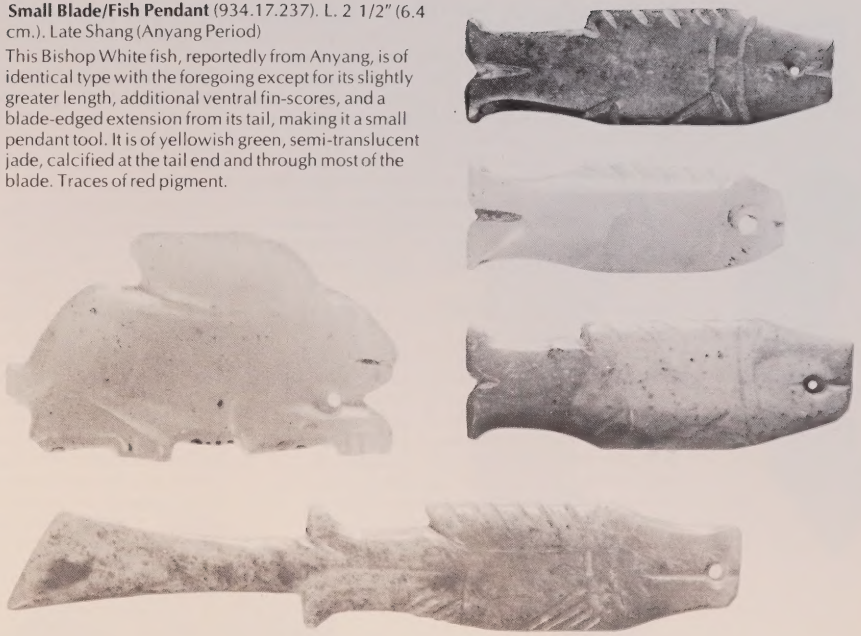
Pale green translucent jade. Tiny creature conceived in profile but realistically carved on both sides. The contained outline tapers at the head, which is separated from the foreleg(s) below by a biconical perforation for stringing. Silhouette adjusted for ear, tail and forward-angled legs. The slightly concave ears lie along the back. The eyes are round; there is a brief mouth-line and indication of paws. Other details are simply rendered by bevelled cuts. Reportedly found with a (later) sheep's head toggle and a similar but now chalky-white hare near Anyang.

Three Fish Pendants (960.241.52,54 and 55). L. 1 1/8" – 1 3/8" (2.8 cm. – 3.5 cm.). Late Shang (Anyang Period)

Three of four small jade fish acquired by Dr. Menzies in 1936 reportedly from Anyang. All are of green jade – .52 darker, .55 calcified, while .54 is a pale, translucent green. All are straight in form, lenticular in section, with silhouette tapering toward straight-edged snout, in-cut for scored dorsal fin, and narrowed into splayed, bifurcated tail. All have triangle-forming score marks to indicate the ventral fins and all but .54 show two gill or neck-lines. Jaw-dividing lines are pierced by conical or biconical perforations which seem to function also as eyes. The stone was polished to a soft lustre. Jade fish pendants of identical type have now been published from royal tombs 1001 (Monograph, Pl. 143:6,7,15) and 1004 (Monogr., Pl. 60:16-19). In Western Chou times, if not in Shang, jade and shell fish were hung in rows or clusters as chimes and chariot crossbar jingles (cf. finds at Chang-chia-p'o, *Fêng Hsi* Report, p. 128, fig. 84 and p. 145, fig. 96).

Small Blade/Fish Pendant (934.17.237). L. 2 1/2" (6.4 cm.). Late Shang (Anyang Period)

This Bishop White fish, reportedly from Anyang, is of identical type with the foregoing except for its slightly greater length, additional ventral fin-scores, and a blade-edged extension from its tail, making it a small pendant tool. It is of yellowish green, semi-translucent jade, calcified at the tail end and through most of the blade. Traces of red pigment.



Bird, Pendant (far right) (931.13.27). L. 2 3/16" (5.5 cm.). Shang style

Mottled but still faintly translucent blue-green jade spotted with gold and white and calcified to a tan colour at edge of crest. Round eye, shoulder-"spiral," wing and tail lines in Shang double-incised line (not yet – or no longer – in linear relief) on both faces. Angular beak; notched crest slants curiously down over part of back. Biconical perforations in crest and tail. Reverse shows arc-shaped depressions (not circular saw-scars) at eye and tail. Slightly convex faces still have a fine polish. A "vertical" bird with flanged crest is designated Late Shang in SKT 6, Pl. 103:7.

Dragon Pendant (932.16.189). L. 2 1/16" (5.3 cm.). Late Shang (Anyang)

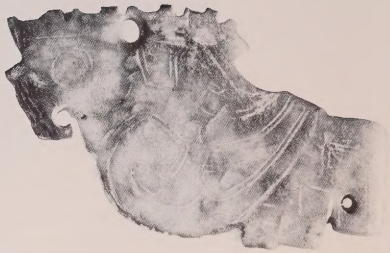
Translucent light green jade with amber vein at tail. Creature conceived in profile within curving triangular outline. Eye, ear, and shoulder and body spirals in thread-relief line on both sides. Dragon image subsequent, however, to three or four piercings of plaque for some other and previous purpose, as details of the animal carving "go out of their way" to circumvent the holes. Traces of earth and red pigment. Reportedly from Northern Honan. For Late Shang jades with openwork see superb *huang* arc from grave 2099 at Hou-chia-chuang, Anyang, and Anyang profile human squatter with cut-out features in Cheng Tê-k'un, *Shang China*, Pls. XXA and D.

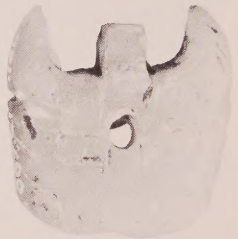
T'ao-T'ieh Mask (931.13.200). L. 1" (2.5 cm.), W. 15/16" (2.4 cm.), Th. 9/32" (.7 cm.). Late Shang (Anyang Period)

Faintly translucent, pale green jade with waxy polish. Obverse has a finer rendition of the same features seen on the back: ox horns between which is rectangular crest (?) decorated with a pair of transverse lines in relief (chevrons on the back); low relief eyes, nose, jaw and ears, and horn lines in relief. Back face slants off slightly below. Its more roughly-incised back features are perhaps analogous to those simpler designs on the backs of carved Shang bones. Biconical perforation through the mask between the horns, for stringing as a bead or pendant, invades the already-carved features and may be secondary. Conical bore in its lower edge; the mask may originally have been designed as a finial. Reported by Bishop White to be from Hsiao-t'un (Anyang), Northern Honan.

T'ao-T'ieh Mask (932.16.13). L. 1 13/16" (4.6 cm.), W. 1 3/16" (3 cm.), Th. 1/4" (7 mm.). Late Shang or Earliest Western Chou

A larger finer "monster" mask of translucent, light green jade. The rectangular form is pierced between the inward-curving, bovine horns and the central crest, which shows a fine herringbone pattern. Ears, nostrils and the irises of the eyes are in flat relief. All other details, including the eye outlines with lengthened and elaborated inner corners are in the thread-line relief typical of mature Shang decorations. The back of what may have been a plaque is polished but plain. A conical perforation under the nose meets one drilled from the back for suspension (upside down). Reportedly from Northern Honan. Traces of earth and red pigment. Probably Late Shang although similar mask excavated from Early Western Chou tomb 207 near Sian in Shensi (see *Fêng Hsi* Monograph, Pl. 85:5). See also mask-decoration of jade ladle from tomb 1 at Hsin-ts'un (*Hsün-Hsien Hsin-ts'un* Monograph, Pl. 101:1).





Coiled Dragon (Ear?) Ring (931.13.337). Diam. 1 1/16" (2.7 cm.), Th. 5/8" (1.6 cm.). Yin-Chou

Divided and indented thick-walled cylinder in form of a "bottle-horned," *t'ao-t'ieh* – masked "dragon"-ring. Conical central perforation. Pale green translucent jade now shows patches of calcification and traces of earth and red pigment. Reported to be from Anyang. Rounded and slotted (more ovoid) dragon earrings illustrated in Pelliot, 1925, Pl. XLI:4-5. Possibly Yin-Chou ancestors of the strange, slotted, coiled-beast rings of the type "Perhaps Ch'u state, 3rd century B.C." in Hansford, 1968, Pls. 54-5.

Squatting Figure Plaque (947.31.27). H. 4 1/8" (10.4 cm.), Th. 3/16" (5 mm.). Shang

This medium green jade squatting profile figure with high crest or headdress was probably carved out of a disk, possibly of *hsüan-chi* type, if the notch in the raised "knee" is to be explained. Crest design, eye, jaw, clawed arm decoration and body décor all in parallel line incising, while lower body details are in outline only. The rump is decorated with an incised circle. The back (it must have been a plaque or inset) is undecorated. Traces of earth and red pigment, and a reported Anyang provenance. Squatter of comparable quality and date illustrated by Na, I, p. 44 Pl. 54:1.

Squatting Figure Pendant (932.16.12). Ht. 3 3/16" (8.1 cm.). Late Shang(?)

This squatter is of pale green translucent jade clouded below with a brown streak and with amber at tip. It was also probably recarved from a *pi* form disk. This time there is a tiny biconical perforation for hanging in the flange of the finely-striated crest. Other differences from the foregoing, beside the finer carving and truer relief-line detail, are the detailed ear and back-flange and the (unusual) placement of a cross-in-circle device on the knee rather than on the rump of the figure where it is most often found. Shang style, if not period, with a reported Honan provenance. Traces of earth and red pigment.

Half-mask Carved on Fish Pendant (at right) (931.13.28). H. 2 1/16" (5.3 cm.), Th. 1/8" (3.5 cm.). Western Chou

Light green jade showing evidence of calcification. Features of half demonic mask in (low) raised-line relief on both sides of a Yin-Chou type of fish pendant. When hung, the mask would be upside down, for the biconical perforation was drilled in the snout of the fish, which only later became the jaw of the mask. The fish tail accommodated the mask's vertical, scalloped horns, while its ventral fins took the demon's ears and jaws. The eyes are in Shang style. Reportedly from Anyang. Traces of earth and red pigment. Identical type of fish pendant excavated from royal tomb 1217 at Hou-chia-chuang, Anyang (*1217* Monograph, Pl. 57:1) and also from Ch'in tomb, with roughly 8th century bronzes, at Ch'in-chia-kou village, Pao-chi, Shensi (KK, 1965, 7, Pl. 4:4). The semi-human, tusked and horned mask is related to the bronze horse crown mask plaques from the Western Chou chariot burials at Chang-chia-p'o, Sian, Shensi (*Fêng-Hsi* Report Pl. 106:1).

Bird Pendant (right) (960.241.49). L. 1 3/4" (4.4 cm.). Yin-Chou

Grey-green, faintly translucent jade partly calcified through burial to the point of a chalky whiteness on the reverse where a break along the tail occurred. Round-edged but flat-sided simplified form of long-tailed bird with eye, wing-tail and claw divisions indicated. Slanting conical perforation drilled through claw-projection from underside for stringing. Cf. bird pendant excavated from Ta-ssū-k'ung-ts'un, Anyang (illustrated in Hansford, 1968, Pl. 12:3).

Bird Pendant (left) (932.16.195). L. 2 7/8" (7.3 cm.). Western Chou

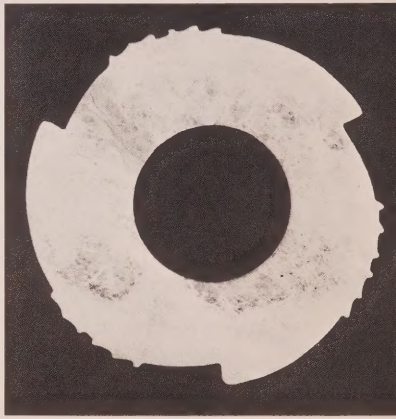
Opaque, buff-coloured (calcified) jade plaque carved in shape of round-eyed, long-tailed bird. Horizontal profile in flat silhouette. Eye, wing outline and claw-scores are the only details. Reverse divided horizontally by a straight saw-scar below which is an odd bulge in the surface; detail same as on obverse notwithstanding. Biconical perforation in breast for stringing. Traces of earth, red pigment and woven material. Reportedly from Northern Honan. Cf. Western Chou bird plaque-pendant from Chang-chia-p'o near Sian in Shensi (Hansford, 1968, Pl. 19, centre).

Bird Pendant (931.13.44). L. 1 7/8" (4.8 cm.). Yin-Chou

Thin plaque of greenish-white, translucent jade fashioned into horizontally conceived profile of a bird with the "hammer-beak" of many Bronze Age birds and bird-dragons. Compact silhouette with linework on both faces almost rhythmic in repetition and interplay. Round eye with crest, horn or ear. Four upward-angled incised wing lines with stone rubbed away from one side of each line toward layered effect; nine downward-curving incised lines on bifurcated tail. Claw beneath breast. Conical perforation under beak in wing-spiral. The pendant bears traces of earth, red pigment and woven material. It reportedly came from Anyang. Cf. Hansford, 1968, Pl. 12:12 excavated at Ta-ssū-k'ung-ts'un, Anyang.

Hsüan-chi Notched Disk (918.7.151). Diam. 6 1/16" (15.4 cm.). Early Western Chou

Pale green translucent stone, now greyish white, tan, and fibrous of surface—translucent only in parts when held to light. The surface is still smooth here and there but there is no evidence of high polish. The biconvex ring, plain on both faces, has three edge notches. On each arc of each resulting "arm" are six projections, the outer ones showing a slight swing toward their ridges as in the lateral flanges on the axe (page 50). There is a faint (wire-incised?) double line across one side of one face of the disk, while one can just make out a single incised line perpendicular to the latter below the perforation. These lines occur on other notched disks and are important to Henri Michel's theory of the use of the *hsüan-chi* with the *tsung* as a stellar template. Comparable specimen in Metropolitan Museum, New York (cf. Na, I, Pl. 99) and there is one with corroded fibrous surface like this one from the Eumorfopoulos collection in the British Museum (Jenyns, 1951, Pl. x). If the mysterious lines exist on either of these pieces, however, they do not show in the photographs, nor are they mentioned in the text. The lines can scarcely be seen on the ROM disk, but they are there.



Cormorant (931.13.43). L. 2" (5.1 cm.). Yin-Chou

Light green translucent jade clouded with brown and cream at wing-curve and leg. Low fine polish. Style similar to that of hammer-beaked bird. This is a cormorant, with two sketchy pairs of scallops on the neck, and a biconical perforation with slot extension separating beak from breast. Traces of earth and red pigment. Reported to be from Northern Honan.

Bird Fish Pendant (931.13.296). L. 2 1/4" (5.7 cm.), Th. 1/8" (3 mm.). Mid Western Chou

A slightly broader, more flowing style is evidenced in this calcified green jade bird pendant. It is also in horizontal position but even more contained in outline. The similar detail on both faces is, in the main, simply incised. In back of the leg joint is an area with scored parallelograms representing a fish's fins. One report states that it came from Loyang, another from Anyang. Faint traces of earth and red pigment. Slightly rounder edges and more curvilinear style suggest the mid Western Chou date. For other examples of the bird and fish combination see Na, II, p. 179 A-F.

Cock Pendant (931.13.39). L. 1 9/16" (4 cm.), Th. 1/4"

Buff-coloured, opaque piece with a trace of translucent green on one side of the tail. Horizontal and profile conception with plain edges and details in a rather broad relief line on both sides. Crested and "bearded", finely-shaped small head with low-relief-disk eyes and a divided, down-curving beak. Single scale or "feather" on the neck. Up-curving wing lines and under-curling tail. Legs bent forward, claws under breast, in which there is biconical perforation. Traces of red pigment. Shang Style, Chou date.

***Hare, Plaque** (947.31.33). L. 1 7/8" (4.7 cm.). Archaistic

Almost wholly calcified, thin plaque with low but still fine polish on both faces, which are carved in the mirror image of a profile hare (?). The design is in incised and bevel-cut linework that follows a Western Chou style but is different from it in the tightness and complexity of ornamental conception. Conical perforations drilled from side shown in nose and at back leg. Almost identical plaque illustrated by *Sotheby*, 1941, no. 185 (shown upside down).

Handle (960.241.40). L. 3 3/4" (9.6 cm.).
Middle Shang

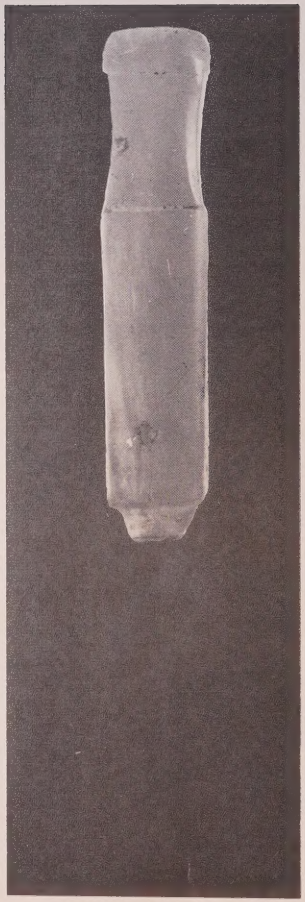
Light grey-green jade with white and gold inner markings and traces of calcification on back and tenon. Short, unevenly formed rectangular shaft is low-polished and plain. It is set off from its hilt-like top by rough, straight grooves front and back with truer insteps at sides. Traces of earth and red pigment. End of tenon for attachment pitted.

Handle (929.11.126). L. 6 1/2" (16.5 cm.), Th. 7/16" (1.1 cm.). Late Shang

Greenish stone calcified to opacity and an off-white surface. Large example with broad and simple but sharply-cut detail. Rectangular in section except for tapering top. Lower end was roughly cut or broken and finished on a diagonal. "Grip" or top decorated with two "bowstrings" in flat relief across its slender part on three sides. Back plain and flat. For a dark example with similarly flat "hilt" band see SKT 6, p. 87 fig. 234, upper right, "Late Shang".

Handle (921.21.500). L. 9 1/8" (23.2 cm.). Yin-Chou

Long, slightly tapering, rectangular shaft of greenish-white jade with gold and white inner streaking and staining. Low polish left minor surface scratching. Slim-waisted, hilt-like finial has a crossbar top and one fine "bowstring" in relief at narrowest point. "Hilt" offset from a shaft which is somewhat uneven and pitted at its lower end. Shaft thicker and more regularly cut on left side (as shown) than right. The piece has a bogus inscription and was rejoined from three pieces, with dark lines and incrustations of bronze patina and earth at the break points, as though added to disguise them. Incrustations of earth and red pigment elsewhere on shaft as well. The Han or later inscription reads "made by Wang Chieh."



Handle (931.13.298). L. 2 7/16" (6.2 cm.).
Early Western Chou
Published: White, *Tombs of Old Loyang*, pl. CXXXVIII:334

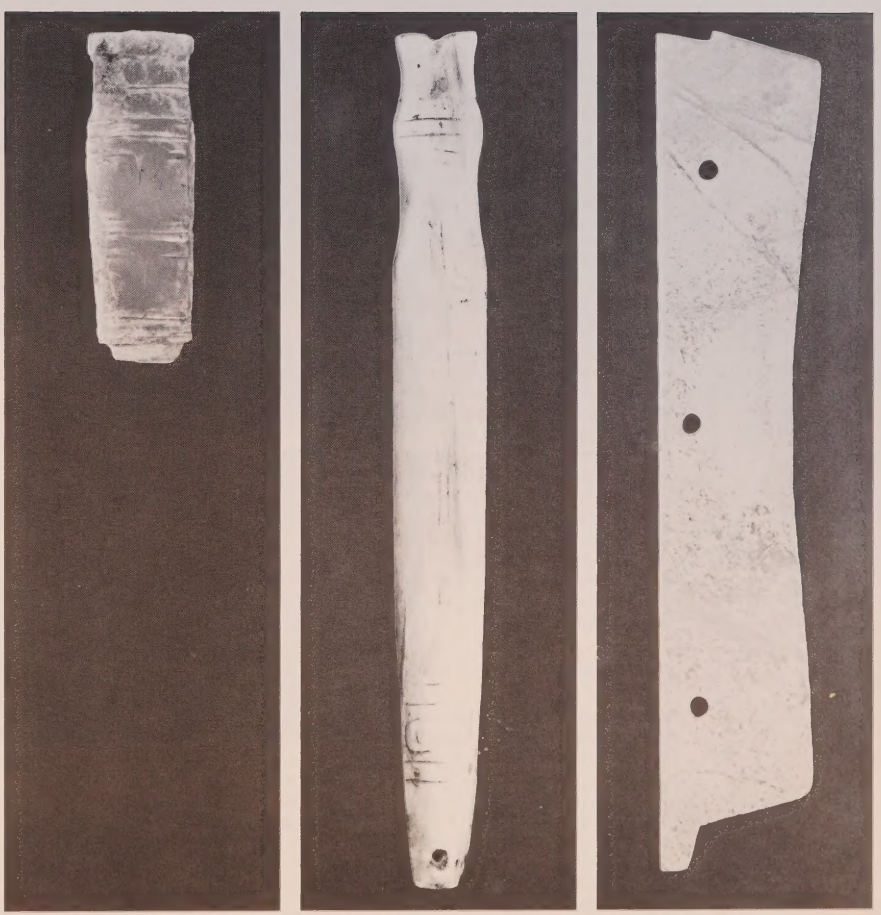
Light green jade, semi-translucent, with traces of calcification. Uneven faces on "twisted" shaft. Bar top, single-bowstring "neck" and two super-imposed bands, separated by "bowstrings," of petal- or scale-like forms. Lower part carved out for tenon. Traces of earth and red pigment. Reportedly from Loyang (Chin-ts'un) tomb with the kneeling bronze figures but of much earlier date. A more evolved handle of this type was mounted with a Western Chou bronze dagger along with a much later guard in a piece from the Winthrop Bequest to the Fogg Art Museum (see Salmony, 1938, Pl. IX:1 "Shang"), while an extremely beautiful example from the same collection was published as no. 20 in the "Winthrop Retrospective" of 1969 when it was dated Early Western Chou.

Fish-handle (925 x 67.2). L. 6 3/4" (17.2 cm.).
Late Western Chou

Faintly translucent, off-white jade with longitudinal, silvery, internal streaking and some gold and grey-brown clouding. Smooth lustre escaped faults at extremities. Straight form, biconvex in section (with flat sides), swelling slightly near bifurcated tail/finial. Lightly incised details on both faces (now almost invisible through wear) include scale-like motif flanked by two pairs of transverse lines setting off "head" and "tail" from "body," and two rows of incised scales along the length of the body on both faces but visible only now on side shown. Biconical perforation in "nose" of "fish" which is probably related to such earlier and more familiar and finely "scaled" handles as the type at the left. This important if provincial piece of the 8th or 7th centuries B.C. helps in relating earlier "petalled" handles to scaled fish forms. It was tested and is nephrite.

Tanged Blade (927.19.271). L. 10 13/16" (27.4 cm.).
Early Western Chou (?)

Pale, grey-green translucent stone almost wholly cal-



cified and white-surfaced through burial. Long knife has a rounded spine along which are three cylindrical perforations, running into short tang or tenon. Concave, fine cutting edge. Broadest end of blade above has a "step" cut into corner. In rejoining this blade, (broken in two and previously mended in China) Peter Cox of the Museum's Conservation Department discovered the break slotted on either side for the insertion of a thin iron disk—presumably to strengthen the join. Possibly related to such semi-tanged great blades as are illustrated by Umehara, 1956, Pl. XLVI: top and middle in Buffalo and Boston respectively, but none precisely like it.

Fish-and-chisel Pendant (934.17.61). L.1 5/8" (3.4 cm.). Late Shang

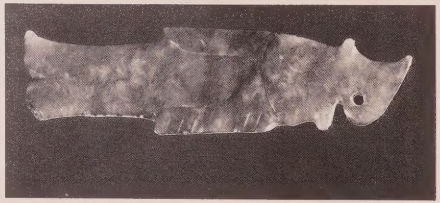
Opaque cream (calcified green ?) jade, finely carved in the near round and polished to a dull lustre. Short straight form ovoid in section with relief and incised detail. Sucking snout of fish has its rim scored to indicate upper and lower jaws and is hollowed to meet a slanting conical perforation drilled from below jaw for suspension. Dorsal fin shows herringbone pattern when viewed from above and there are four, scored ventral fins in relief. Cutting edge of mini-chisel is parallel to full fish tail as seen in profile. Traces of earth and red pigment. Reportedly from Anyang. Similar conception, although finer or earlier make, to that of a dark green, fish-handled earspoon pendant in the collection.

Fish Pendant (931.13.29). L. 2 5/16" (5.9 cm.). Yin-Chou

Light green jade, clouded but semi-translucent. Straight form, flat sides carved with "mirror image" details; a so-called "hammer-beak" extending, but set off from, the round-eyed fish's face, curving neck or gill line, scored dorsal and ventral fins, and bevel-edged, long, bifurcated tail. A biconical perforation for stringing forms part of the definition of the hammer-beak which is more familiar from Yin and Early Chou dragon and bird designs. Traces of earth and red pigment. Reportedly from Anyang.

Fish Pendant (935.50.14). L. 2 7/16" (6.1 cm.). Early Western Chou

Grey-green, translucent jade with lighter transverse veining and traces of calcification at head and tail. Polish on both faces, traces of scarring and pitting on one. Curved piece with silhouette adjusted for nose, fins and tail. Circular eyes, scored dorsal fin; ventral fins are slightly set-off, scored parallelograms. Edges rounded in this fish, unlike earlier or less carefully polished ones. Biconical perforation for stringing in under-curling extension from snout. This gives the fish, and one other like it in the collection, its character. This extension may define the swordfish (seen on Li-yü water-basins of Eastern Chou times), or it may be related to a Western Chou habit of adding elephant trunks to various real and imagined forms. Traces of earth and red pigment. Reported Anyang provenance.

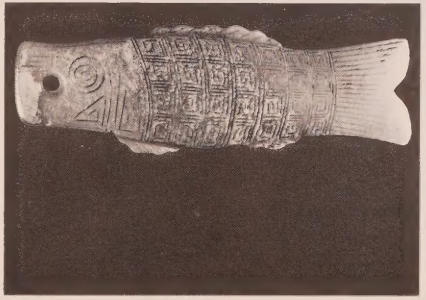


Fish Pendant (931.13.40). L. 2 13/16" (7.1 cm.).
Late Shang (Anyang Period)

Very light green translucent jade with lighter veins, gold clouding and one dark marking in dorsal fin. Curved outline carved for lips, dorsal fin and tail. Details are the same on both flattish faces but do not meet at the edges. Whole polished to a fine waxy lustre. Splayed and bifurcated snout and tail. Body carved with two horizontal rows of five scales each, which have a slight overlapping effect due to abrasive work behind the incising. The tail is ornamented with four semi-relief lines which curve in pairs toward the edge from spiral-origins. Conical perforations in upper jaw and tail drilled from one side only; in same side, near the snout, is the mark of a tentative bore nearer the edge. ROM's 935.50.14, reportedly from Anyang, is similar but lacks the tail decoration, while a comparable fish, far more summarily carved than either of these, was excavated from a Western Chou burial at P'u-tu-ts'un near Sian, Shensi in 1954 (cf. Hansford, 1968, Pl. 21:6).

*__Fish Pendant__ (919.1.4). L. 2 3/4" (7 cm.).
Archaistic: Ch'ing

Yellowish-green jade, translucent except for opaque or calcified section through centre and near mouth. Straight body has slightly convex faces both with finely incised, linear decoration. Dorsal and ventral fins are wave-edged and etched with fine lines, as is the tail. Eyes are formed of three incised concentric circles, while angular and triangular motifs and bands of meanders give the rest of the creature its peculiar character. Biconical perforation in nose. The piece probably dates from the Ch'ing Dynasty. Closest comparison is with an illustration from the *Ku-yü t'u-p'u* reproduced by Laufer, 1912, p. 226 fig. 133.



Tiger Pendant (931.13.3). L. 3 3/16" (8.1 cm.), Th. 3/8" (9 mm.). Yin-Chou

Crouching tiger fitting designed to be viewed from above. White jade, clouded but semi-translucent, with dark vein in back, amber patch at tail and brown spot below jaw. Polished to the same waxy lustre as the bird in flight. The flat, rectangular body is treated in the simplest manner, only shoulders and haunches indicated, while the feline mask at one end is partly in the Shang relief-line style and the thick tail at the other curls to the creature's right in a raised ring about a biconical perforation (a pair of conical perforations connect nose-end and underside as well). The lower side is polished and plain, but for four, divided, low-relief rectangles representing legs and claws. The right flank shows a groove coinciding with tentative perforations, one over each leg, while there is another groove visible on the right haunch. Traces of earth, red pigment and woven fabric remain on the underside. Reportedly from Anyang. For a similar concept but far more primitive rendering in stone see *1001*, II, Pl. XCIV: 1.

Bird (932.16.192). Ht. 1 9/16" (4 cm.). Late Shang

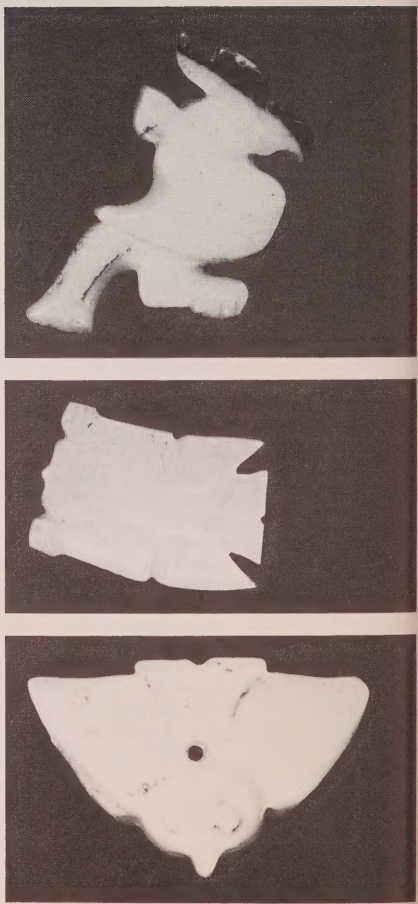
Opaque, cream-white jade with black-edged brown trace of the matrix of the jade vein. Aquiline beak, angular horn, forward-angled leg and dropping tail. Vertical, somewhat awkward, representation in silhouette is innocent of detail or decoration except for simply incised wing lines. Tiny perforation in top of horn. Traces of earth. Reportedly from Northern Honan.

Bird (935.50.15). L. 1 1/6" (2.7 cm.), Th. 1/4" (7 mm.). Late Shang (Anyang)

This translucent, white jade bird-fitting is roughly rectangular and carved as though seen from above. Finely scored "arms" and wings originate from simple spirals while the brief tail is also striated. Underside is polished but plain and there are two pairs of edge-to-back perforations (under beak and at tail) for attachment. Faint traces of earth. Reportedly from "Elephant Tomb," Anyang.

Bird Pendant (932.16.191). Max. Dimension 1 9/16" (4 cm.). Yin-Chou

Opaque white triangular bird seen as though in flight. Wide, plain wings set off from brief body and tail by



simply-incised curving lines. Form shows subtle refinement of outline and is slightly rounded. The underside is more convex, with angular feet. Conical perforation straight through body as though for stringing as a bead, while there is also a biconical opening through the beak for suspension as a pendant. Traces of straight saw, earth and red pigment. Reportedly from Northern Honan. The green fellow to this bird (page 61), is sharper of edge and more stereotyped in form. Cf. Hansford, 1968, Pl. 12:8 excavated at Ta-ssŭ-k'ung-ts'un, Anyang.

Bird Pendant (932.16.190). Max. Dimension 1 15/16" (4.9 cm.). Yin-Chou

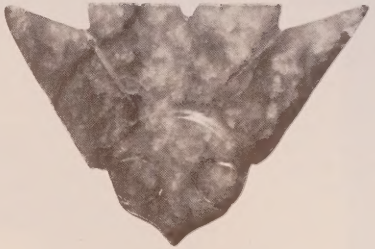
Soft grey-green jade, white-flecked and semi-translucent, with amber vein and patches. Bird conceived in flight and like white example carved in roughly triangular form except that here it is more stereotyped in detail. Large round eyes in small-beaked, round head in light relief against a flat and plain body except for its indented and incised main divisions. Underside rounded toward upper edges with legs and feet represented by divided, low-relief, rectangular blocks. Conical perforations meet under the beak for stringing. Reportedly from Northern Honan.

Fish Pendant (932.16.184). L. 2 5/8" (6.6 cm.). Early Western Chou

Semi-translucent white jade with interior white flecking. Arc-shaped form slight in-cut at head and at tail below for ventral fins. Curving form and shadows of concentric grooves on both faces suggest recarving from a (Late Shang?) grooved disk. Abortive perforation near tail end of body on one face. Conical perforation in snout. Eye, neck-line and striated fins done in slightly slanting scores. Traces of earth and red pigment and a reported Northern Honan provenance. Cf. T-section disks from Late Shang great tomb 1217 (*1217*, Pl. 42:16, 17) with concentric ring surface decoration, and Western Chou jade fish from Shensi illustrated in *Fêng Hsi* Report. Pl. LXXXIV:11.

Ox Mask (932.16.14). Ht. 1 11/16" (4.3 cm.). Early Western Chou

Buff-coloured, opaque (calcified?), thin jade mask. Roughly trapezoidal outline carved to show crest, horns, ears and cheek and jawlines. Simply and roughly incised surface details: angular horn-spirals, eyes with elongated inner corners; nose scarcely indicated. Back polished but plain. Biconical perforation for stringing centred in plain and thin lower part of mask, so that when hung it would be fragile and upside down. Reportedly from Northern Honan. Cf. ox mask excavated from Western Chou tomb 1 at Hsin-ts'un in Hsün Hsien (*Hsin-ts'un* Monograph, Pl. CII: 1, rubbing).

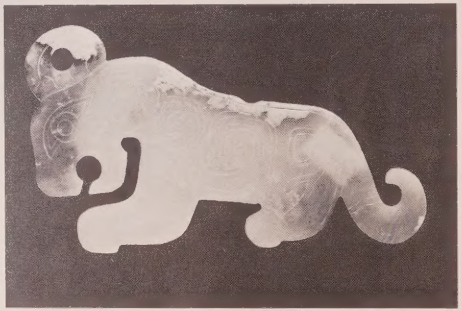


Tiger Pendant (931.13.26). L. 2 3/8" (6 cm.).
Early Western Chou

Mottled white jade tinged with grey at jaw and foreleg. Thin slice of jade carved in outline of stalking tiger seen in profile, jaws down, legs bent forward, back curving twice, with a dropping tail broken off just at (perforated) tip. Biconical perforation in jaw. Minimum of simply incised and bevel-cut linear detail. Traces of earth, red pigment and woven material. Reported to have come from Anyang. Cf. calcified green Sonnenschein tiger plaque in Chicago in Salmony, 1952, Pl. XXXVII: 8 "Early Western Chou."

*__Tiger__ (937 x 65). L. 4 13/16" (12.2 cm.). Modern

Pale green translucent jade with lighter and darker amber shadows at head and ear and pitted traces of calcification along upper edge. Plaque extremely thin, even, and polished to a high lustre. Profile conception. Double-line-incised details identical (though not identically located) on both sides. Stone appears good, manner is archaic (Yin-Chou), but both outline and surface detail suggest modern tools and techniques. For a Bronze Age original of this design see the stone tiger chime from Wu-kuan-ts'un in Umehara, 1964, Pl. CXLIII:1.



Fish (918.7.141). L.3 11/16" (9.4 cm.).
Early Western Chou

Translucent, pale, grey-green stone polished to smoothness without lustre. Long, straight, thin and very fine piece with flat sides, bevelled edges and mirror image detail on both sides. Straight saw-scar lengthwise on one face, small biconical perforation in snout with scar of tentative bore nearer edge on same side as saw-mark. Tapering head has slightly splayed snout and round eye. Finest striae incised on fins, the two ventral ones being low relief parallelograms. Body shows "entasis" before slant-edged, bifurcated tail. Faint traces of earth. Similar types excavated at such Western Chou sites as Chang-chia-p'o, Sian, Shensi (1956-7). Reportedly from Honan.

Ko Dagger-axe (?) (927.19.52). L. 7 5/8" (19.3 cm.).
Early Western Chou
Published: Menzies, *The Shang Ko*, Pl. XIII: 32 (II F).

Mottled green, grey-brown and buff jade, translucent at very edges of blade and polished to fine waxy lustre. Nearly straight blade shows midrib on both faces from which it slants toward sharp sides. Incised inner border rather than bevelled edges. Slight rectangular projection from the curve of the blade at one side near the tip (its opposite number was probably chipped off). The tang tapers toward a straight, pitted butt from blade-tang-dividing projections which, however, are not opposite each other. A large, conical perforation is unusually close to butt end as though for hanging rather than hafting. Broad, transverse area of decoration featuring pairs of spirals about nuclei on both faces, from head of blade almost to perforation (invisible if blade were hafted). Shang *ko* and Early Western Chou dagger types are combined in this piece. Traces of earth. Obtained by Bishop White in Kaifeng in 1927. Cf. jade sceptre (?) with related decoration and mixed typological character in Umehara, 1956, Pl. XXXVI.

Ko Dagger-axe (947.31.31). L. 5" (12.6 cm.).
Western Chou

Grey-green jade with buff spots and slight calcification, translucent only at thinnest edges. Thin, flat, straight blade rises to midrib on each face and has broadly bevelled edges. Bevelling continues along sides of tang, which is set in from the blade by a tiny straight step on one side and a slightly hooked one on the other. Butt end of tang has two projections, one notched. Small conical perforation at juncture of blade and tang. Longitudinal pit left by otherwise even polish on each face of blade near the sharply pointed tip. Incrustations of earth.

Bird-ko, Pendant (931.13.37). L. 2 5/8" (6.6 cm.).
Early Western Chou

Faintly translucent, ivory jade, polished to fine lustre. Recarved in ancient times from disk segment into

curving blade with midrib and bevelled edges. "Tang" of blade shaped as disk-eyed, Bronze Age, "hammer-beaked" creature head with notched projection in middle of butt/brow. Tang and blade together form a kind of bird head and "body". Smaller of two biconical perforations helps to define hammer-beak, a larger one having been drilled above the eye for suspension. Blade broken and rejoined. Traces of earth and red pigment. Reportedly from Anyang. Cf. hammer-beak-tanged *ko* from Western Chou tomb 208 (*Fêng Hsi* Report, Pl. LXXXVI:5).

Ceremonial Blade (928.12.81). L. 16 3/4" (42.5 cm.). Yin-Chou

Clouded but translucent light green jade with amber-to-brown veining. Polish leaves surface and edge pitting. The long trapezoidal blade shows an early unevenness of form, partly invaded now by calcification. A slightly concave cutting edge was bevelled to extreme thinness from one side only. The four conical perforations (somewhat puzzling in placement) were drilled alternatingly from the obverse or bevelled face and reverse. Formerly in the collection of Wu Ta-ch'êng. Cf. Winthrop-Fogg, Buffalo and Boston ceremonial blades in Umehara, 1955, Pls. XLV-XLVI, although similarities with these and the very few excavated blades are general rather than precise.

Ceremonial Blade (928.12.83). L. 13" (33.1 cm.). Western Chou

Large heavy piece of amber and tan stone with dark brown spotting and buff clouding from calcification. Completely opaque. Straight spine shows straight saw-scars interrupted by semi-circular notches from conical bores in line with the two conical perforations in the blade. Flaring top, slightly concave cutting edge broadly bevelled on both faces. Polished, slightly slanting narrow end diagonally cut to blade edge and spine. No trace of a circular saw. Signs of wear on reverse. Ex. Wu Ta-ch'êng collection. No precisely comparable specimen has been excavated. Closest, perhaps, is a blade illustrated by Pelliot, 1925, Pl. XI:2.

Blade (928.12.101). L. 7 1/2" (19.1 cm.).
Western Chou

Thin fine blade of opaque darker and lighter chocolate tone stone with mottled clouding on cutting edge side including small cream patches. Form rounded from straight spine above, rectangular below, with a very slightly concave cutting edge finely bevelled from both faces. Three perforations not in alignment — the upper one conical, the middle cylindrical and large, the lowermost one biconical and small. Fine low polish.

Knife (934.17.233). L. 5 13/16" (14.7 cm.).
Western Chou

Medium green jade, semi-translucent, veined with white and containing clouds of minute black particles. Unevenly polished to a waxy lustre. Tanged blade has a straight spine and a curving cutting edge which is not very sharp. Transverse saw scars and pitting on one face and edge of tang. A straight longitudinal scar is visible down the centre of the blade. The slanting biconical perforation was roughly centred in the upper part of the blade. Incrustations of earth. Reportedly from Anyang. Cf. bronze knife from the Late Shang great tomb at Wu-kuan-ts'un illustrated in SKT 6, p. 140 fig. 431. It is much simpler than the tanged jade Winthrop knife with eccentrically flanged spine (Umehara, 1956, Pl. L: right) but may be of roughly the same period.

Axe (929.11.51). L. 6 3/8" (16.2 cm.).
Early Western Chou

Faintly translucent, gold-green jade mottled with amber and white and with a dark brown vein running unevenly down centre. Thin, even, trapezoidal slab with finely finished straight sides and butt. Slightly slanting cutting edge nicked but still sharp. Step-like chip at corner of butt probably part of design, as in notched *ko* and other axe-tangs, although this is rough. Central conical perforation about 1" in from butt edge; smaller, higher one is off-centre and biconical. For combinations of axe, blade and handle forms with flanges and fragments of various types see finds from Western Chou tombs 211 and 123 at Chung-chou-lu, Loyang (CCL Monograph, Pls. 42-3).

Pair of Flanges (930.21.211-12). L. 1 7/16" (3.7 cm.).
Western Chou

Fine, thin and sharply cut pair of lateral flanges fashioned separately from object with which they were to have been associated; no means for attachment or stringing. Grey-green opaque stone polished to a dull sheen and almost wholly calcified. Traces of earth and red pigment. Cf. flanges from Western Chou tombs 211 and 123 at Chung-chou-lu, Loyang in CCL Monograph, Pls. 42-3.

Earspoon Pendant (932.16.27). L. 2 15/16" (7.4 cm.).
Western Chou

Roughly triangular head or handle, with one thinner scalloped edge, extends undivided into bevel-cut shaft of earspoon. Similar grey-green, calcified stone as the pair of flanges. Biconical perforation in head for suspension.

Plaque (929.11.59). L. 2 7/16" (6.2 cm.). Mid to Late Western Chou

Flat and fairly thin trapezoidal plaque of palest grey-green, translucent jade with white veining and black speck inclusions. Low polish of plain surfaces left minor pitting, traces of abrasion and straight saw scars. Flange-form edges on three sides. Traces of earth, red pigment and woven material.

Animal Mask, Bead (932.16.176). Max. Dimension 1 1/8" (2.9 cm.). Western Chou

Semi-translucent, pale green jade with brown tinge at the tip of one horn. The frontal mask, roughly triangular in outline, is characterized mainly by its rounded and grooved, crescent-forming horns. There are mere points for ears and a disk-eyed face tapering to the muzzle. The forms here, although simple, are more plastic and curved than linear and angular. The back and sides are plain, except for the horn-grooves. The piece is thick enough to accommodate a generous, slightly conical perforation drilled vertically through its centre from between the horns to under the nose. There are traces of earth. For the triangular silhouette and rounding of forms cf. a ram's head pendant from the Sonnenschein collection (Salmony, 1938, Pl. XV:3) which, in turn, is comparable to a ram mask ornament excavated from tomb 21 at Hsin-ts'un, Hsün Hsien, Honan (*Hsin-ts'un* Monograph, Pl. VI:2).

Dragon-headed Silkworm, Pendant (932.16.19). L. 1 5/8" (4 cm.). Late Western Chou

Light green jade, semi-translucent, with occasional light flecks. Curving and tapering arc-shaped creature has segmented body of the silkworm (more evenly rounded than the comparably grooved roundness of the horns of the animal mask) and the head of a dragon with back-curling tusks. There is a complex bore beneath tip of body, while slanting conical perforations meet under the jaw for stringing. Banded curvilinear tusks suggest a Western Chou date. Traces of earth in crevices. Reportedly from Northern Honan. Cf. related creatures from the Middle Chou site at Shang-ts'un-ling strung on necklace (?)—STL Monograph, Pl. 24:1 from tomb 1720.

Two "Scale" Beads (960.241.43AB). L. 1 7/16" (3.7 cm.). Middle Chou

Two scale-shaped beads of faintly translucent, tan-grey-green jade (?). Slightly convex forms decorated with incised patterns on obverse. Backs flat and plain. Paired perforations, two above and two below, join upper and lower edges to backs for fixing or stringing. Similar "scales" excavated from the (Middle Chou) Kuo state cemetery at Shang-ts'un-ling in Honan in 1956-7. Cf. rows of bronze scales from horse trappings of chariot burial at Chang-chia-p'o near Sian (*Fêng-hsi*, Pl. 107:6). For the type of ornament for which these carved scale fittings, the oval beads and the drops, might have been intended, see *Hsin Chung-kuo*, Pl. XLVI, a necklace (?) reconstructed from finds excavated from tomb 1820 of the Kuo state cemetery at Shang-ts'un-ling, Honan (STL Monograph, Pls. XXIV-V).

Two Flat Beads (960.241.42AB), L. 1" (2.5 cm.). Middle Chou

Semi-translucent greenish-grey stone. Roughly shaped into flat, unevenly oval pieces. Plain on both sides but for minor pitting, scratching and traces of cutting. Small perforations through centres. They resemble the flat bead in the reconstruction of a scale-bead necklace (?) from Shang-ts'un-ling tomb 1634 (cf. STL Monograph, pl. XXV:2).

Seven Beads (921.21.365-371). Longest 1" (2.5 cm.). Middle Chou

Semi-translucent grey-green to opaque-brownish green in colour, some with white and gold flecking and traces of calcification. Rough or irregular teardrop shapes show surface pitting and occasional (straight) saw-scars. Pairs of down- and in-slanting conical perforations were drilled to meet in *thicker* ends, unlike the otherwise similar beads from Shang-ts'un-ling illustrated in the Report on this Honan site. ROM 933.23.101AB (Pl. CXXXVIII:331a in White, *Tombs*) are larger drops of slightly purer greenish jade perforated through their pointed ends, which also show traces of bronze "caps" and may be considerably later.

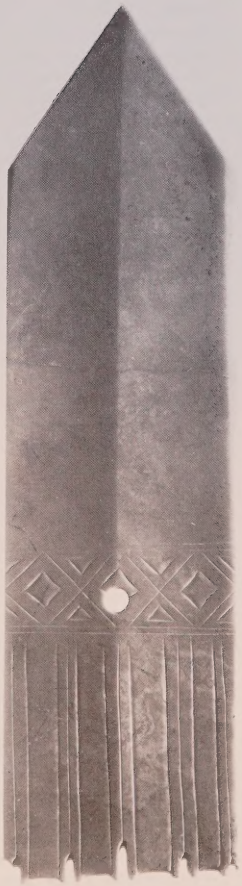
Ko-Kuei Tablet (928.12.49). L. 9 1/16" (22.9 cm.). Chou
Published: Menzies, *The Shang Ko*, Pl. XIV:33 (type IIF).

Mottled opaque jade of light green, gold and buff tones polished to a low sheen leaving fine scratches especially at edges. Straight form has midrib from tip to butt with a long bevel on one side of the blade. The sides are blunt-edged. Where they slant toward the sharp tip they are divided by straight ridges from unevenly meeting saw-cuts. "Tang" and "blade" are divided solely by bordered band of incised lozenge décor, interrupted (slightly off-centre) by a conical perforation on the midrib. The crenellated butt of the "tang" is connected with the lozenge border by triplets of incised and bevel-cut lines. Menzies suggested that the *kuei* was reshaped from a large Shang *ko*. Even if this is allowed, the major import of this (rejoined) tablet is its transitional character, which buttresses the theory of the dagger-axe origin of the pointed ritual jade called *kuei*. Traces of earth and red pigment. Obtained by Bishop White in Kaifeng in 1928 where it was reported to have come from Western Honan. Cf. tan-coloured *ko* in Nelson Gallery, Kansas City (Salmony, 1963, Pl. IV:2) for the type from which this may have been cut down – if it was recut. The tang design is known from excavations at Anyang but not the bevel-cut lozenges.

Pair of Headdress Ornaments (933.23.129-30). Ht. 1 5/8" (4.1 cm.), Th. 1/8" (3 mm.). Chou
Published: White, *Tombs of Old Loyang*, Pl. CL: 359b (reverse side only).

Translucent light green jade. Vertical "bowknot" shape. Three divided relief bands cross the narrowed centre. Three pairs of perforations join top edge to back and three the bottom to the back for attachment. Obverse symmetrically decorated above and below banded "waist" with central scale-like motifs flanked by outward-curving double lines. Late Western Chou curvilinear dragon patterns on backs indicate that the plaques were re-cut, perhaps in Ch'un Ch'iu or Early Eastern Chou times. Traces of earth and red powder.

Cf. reverse carving style with Western Chou jade from P'u-tu-ts'un illustrated by Hansford, 1968, Pl. 21:4. For a similar, if slightly later, piece as these from the front see jade "bowknots" from Late Ch'un ch'iu Shou Hsien in Anhui (*Ts'ai-hou mu* Monograph, Pls. 29: 1-3 and 106: 7). The "waisted" form and headdress type or function had a Shang-Yin origin in jade comb-tops and carved bone hairpins from Anyang (see Umehara, 1956, Pl. LXIX, lower right, and the same author's work of 1964, p. 86 fig. 38, right in drawing). A Han jade version is illustrated in *Chosen*, III, Pl. 65:234 and one way the ornament was worn in Han times must have been attached to bar-form headdresses like that of Hsi Wang Mu in some, although not all, Han pictorial reliefs which show the Taoist goddess.



Earring (932.16.32). L. 1 5/16″ (3.3 cm.). Chou

Semi-translucent, yellowish-green jade now completely white and opaque but for one patch on outer curve. Flat and polished but plain ovoid shape with rounded edge. Narrow slot, characteristic of disks found in Middle Chou times near the ears of the dead, does not merge with central perforation. Incrustations of earth. Reportedly from Northern Honan.

Earring (932.16.183). L. 1 5/16″ (3.3 cm.). Chou

Grey-green jade with brown patches at one edge. Flattened drop-shaped piece with rounded and polished edges. V-shaped slot from wider end does not quite reach the perforation, which is nearer the narrower end. Tiny, abortive bore above on one face. Traces of earth and red pigment. Like 932.16.25 this is probably a regional variant of the slotted disk.

Earring (933.23.144). Diam. 1 11/16″ (4.3 cm.). 8th-7th century B.C.
Published: White, *Tombs of Old Loyang*, Pl. CXXII:306b

Flat, coiled dragon-form of slotted ring or disk. Grey-green translucent stone with dull finish on both faces. "Dragon" outline and detail incised on obverse only. One of a pair(?) with 933.23.145 in which, however, the head has been rejoined and the tail broken off. 933.23.146 is identical with these but smaller. Reported to be from Chin-ts'un. Similar if finer piece excavated from tomb 1662 at Shang-ts'un-ling, Honan (cf. STL Monograph, Pl. XXIX:7).

Pair of Earrings (far right) (933.23.190AB). Diam. 1 1/4″ (3.1 cm.). Early Eastern Chou
Published: White, *Tombs of Old Loyang*, Pl. CXLIX:358b

Classic examples of earring type called *chüeh*. Thin plain disks slotted through to (conical) central perforations, even form and soft polish. Mottled but translucent reddish-brown jade, the same colour as the second decorated appliqué plaque on page 74. Incrustations of earth. Cf. slotted disks excavated with notch-edged rectangular appliqué plaques from Eastern Chou stage 2 burial 1 at Chung-chou-lu, Loyang (CCL Monograph, Pl. 49:5).

Earring (960.241.44). W. 1 5/8″ (4.1 cm.). Early Eastern Chou

Very thin slotted disk of yellow-green, translucent jade with dull finish on reverse. Obverse carved with

slightly concave, S-curved and spiral bands with additional single and double-line curls. Somewhat shakily incised borders. Edge chipped and portions rejoined and restored. Design is of identical type to that of darker green appliqué plaque on page 74. Both can be compared for design to that on a stone *pi* from Eastern Chou stage 3 burial 115 and Chung-chou-lu (see CCL Monograph, Pl. 57:4).

Conical Ring (927.19.25). H. 1 1/4" (3.2 cm.).
Early Eastern Chou

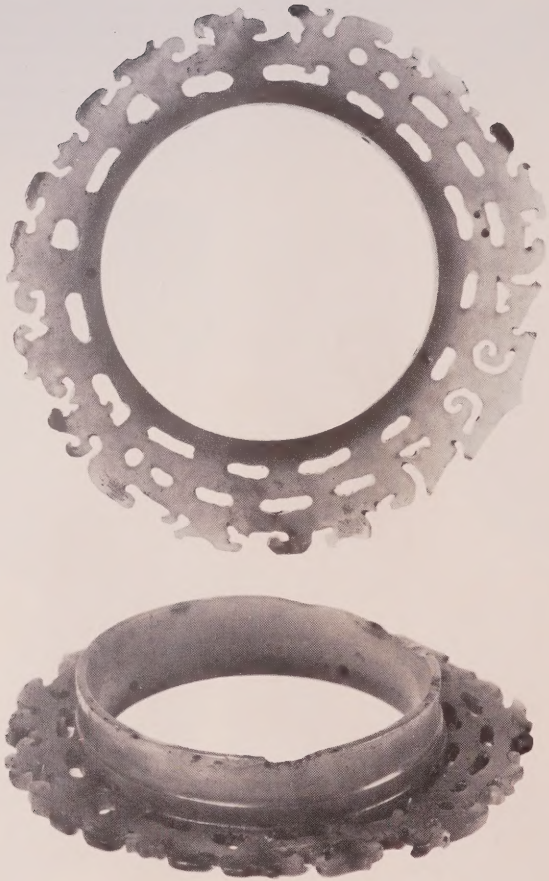
Faintly translucent blue-green stone finely veined with white and gold, with darkening on one side and almost complete calcification. Truncated conical form perforated but thick-walled. Exterior carved for nine encircling ribs. There is a slightly longer, tapering cylinder with fluted wall in the collection which may be related to this one in function, as it is in form. Slotted and ridged rings of this type suggest a relationship to the slotted disk and grooved cylindrical earrings of Bronze Age and later China. Comparable "bow-string"-decorated hollow cylindrical ring with slot excavated from Eastern Chou stage 2 tomb 4 at Chung-chou-lu, Loyang (cf. CCL Monograph, p. 113 fig. 81:4 and Pl. 51:4). See also gold fluted ring from section A tomb 1 at Shih-chai-shan in Yünnan (KKHP, 1, 1956, Pl. 7:5) and pair of small, ridged, conical jades with decorated ends (reportedly from Shou Hsien) in the University Museum 1940 Exhibition Catalogue, Pls. XIII:245 and XIV:270.

***Chime** (929.11.52). Diam. 6 1/4" (15.9 cm.).
13th-15th century

Translucent blue-green stone with cream veining and gold clouding. Creeping surface calcification obscures some of the fine "rococo" ornament (the same on both faces). Large slotted disk with biconical perforations for hanging, probably as chime, to either side of the opening and near the outer edge. Wall of open centre of disk carved with four projections to accommodate spiral ends of ear- and wave-like motifs. Held upside down rather than suspended, one can see a highly ornamental elephant *t'ao-t'ieh* (with lenticular eyes) carved to either side of the slot above the perforations. The rest of the linear and low relief decoration consists of curvilinear cloud and wave-like scrolls, dots, etc., with a hatched lozenge on each face centred opposite the slot. Almost identical example, except of white jade, illustrated in Laufer, 1912, p. 187 fig. 92 — drawing after Wu Ta-ch'êng.

Ring with Ornate Flange, 2 views (921.21.375). Diam. of collar 3 1/4" (8.2 cm.), of ring 2 1/4" (5.6 cm.), H. 9/16" (1.4 cm.). Eastern Chou

Medium green translucent jade with brown markings at edges. Ring proper has plain inner surface while the outside is divided by a ridge under the flange. Flange or "collar" has an ornately carved outline including a crown-like element, pierced openwork, and a surface decorated with dense and finely-etched geometric patterning. Spaced about the angle between flange and ring are five pairs of joining perforations for attachment (to what is uncertain). The piece has been called a "cover." It is more likely, at least at one stage of its conception, to have been an earring or ear-plug, for the closest analogy to it in size and kind is a hammered gold ear-spool from Peru. Cf. jade ring with openwork flange in Cernuschi Museum, Paris (Umehara, 1955, Pl. LXXIX), the scratched and ornate decor on a Freer Gallery fitting (Salmony, 1938, Pl. XXVII:5), and Wardwell, 1968, Pl. 2 (colour), one of a pair of gold earspools 4 1/2" in diam. from Peru (thought to be Chavín – c. 400-200 B.C.).



Bead or Finial (933.23.105). Ht. 1" (2.5 cm.).
Eastern Chou, late 6th or early 5th century B.C.
Published: White, *Tombs of Old Loyang*, Pl. CL:359f
Clouded but translucent grey-green jade polished to a soft lustre and finely (but not identically) carved on both faces with rounded, spiral-ended and spiral-decorated forms with single and parallel line accents, connectives and fillers. Flat T-form piece biconically perforated through centre. Scalloped silhouette accommodates rounded forms within. Traces of earth and red pigment. Cf. c. 500 B.C.(?) beads and fittings from Marquis Chao of Ts'ai tomb at Shou Hsien (*Ts'ai-hou mu* Monograph, Ps. 105:1,4,7 and 28).

Long Bead or Fitting (932.16.177). L. 3 1/8" (7.9 cm.).
Eastern Chou, late 6th or early 5th century B.C.
Mottled green, brown, amber and cream jade with faintest traces of calcification along veins. Fine waxy polish. Thin rectangular form perforated neatly and centrally from top to bottom and carved with dragon profiles and right-angle, spiral-ended forms expressed also in the indented silhouette. Carving on both faces is in low rounded relief with finely incised eyes, curls, striated bars. Faint traces of earth and red pigment. Cf. rubbings of jade from Liu-li-ko tomb 60 (*Shan-piao-chên yü Liu-li-ko* Monograph, Pl. 110:3-10).

Dragon Pendant (915.7.6). L. 3 15/16" (10 cm.).
Early Eastern Chou, *c.* 500 B.C.
Pale grey-green, semi-translucent jade with amber patches at ear, belly and tail and traces of calcification. S-curved dragon ornately carved within borders on both faces with dense comma and C-forms in rounded relief interspersed with finely striated-and-banded curls. Up-curling snout and jaw bordered with a striated band. In ear and on body are faint linear space-fillers imitating granulation. Wide conical perforations in neck and tail, smaller biconical one in belly below "claw," suggest use as a cross-piece in a set of girdle-pendants. Similar style dragon pendants from Ts'ai-hou tomb of Shou Hsien (cf. Monograph, Pl. 28:20-21, below, and Pl. 205 rubbings 12-13).

Appliqué Plaque (933.23.132). L. 1 5/8" (4.1 cm.). Early Eastern Chou

Thin rectangular plaque of mottled, semi-translucent, medium green jade. Obverse decorated with slightly concave, S-curved and spiral bands with incised connecting-lines. Back plain except for longitudinal saw-scar. Four small biconical perforations, one in each corner. Traces of earth and red pigment. Plaque rejoined from two pieces; reported to be from Chin-ts'un. Slightly simplified version of design on stone *pi* from Eastern Chou stage 3 tomb 115 at Chung-chou-lu (CCL Monograph, Pl. 57:4).

Appliqué (?) Plaque (931.13.172). L. 1 5/16" (3.3 cm.). Early Eastern Chou

Published: White, *Tombs of Old Loyang*, pl. CXXXIV:328 (above, left)

Thin slice of russet-coloured jade like that of the pair of earrings (page 70, far right). The semi-translucent stone retains its low, even polish but shows traces of calcification. Square form on this one of five similar plaques, and one chipped corner. Single conical perforation drilled in pre-gouged patch in *decorated* face (near centre of left side as shown). Design of broad, slightly concave, S-curved bands with extensions, striated bands and two eye-like motifs. Back plain. Traces of earth and red pigment. Cf. design on stone *pi* disk from Eastern Chou stage 3 tomb 115 at Chung-chou-lu, Loyang (CCL Monograph, Pl. 57:4).

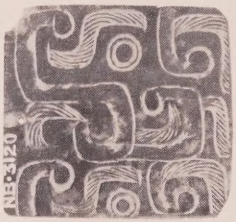
Appliqué Plaque (top right) (931.13.53). L. 1 15/16" (4.9 cm.). Early Eastern Chou

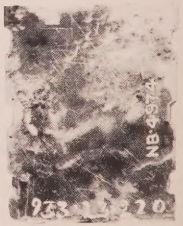
Published: White, *Tombs of Old Loyang*, pl. CXXXIV

Mottled grey-green, tan and brown stone, sliced thin enough to be translucent but left without polish. One of four similar plaques of square-to-rectangular form with conical perforations in each of the four corners drilled from the decorated face. Scratched, backward-S-curved and banded motifs with additional curls and "eyes" suggesting profile dragon heads. Shakily incised border. Traces of earth and woven material.

Appliqué Plaque (960.241.41A). Max. L. 1 15/16" (4.9 cm.). Early Eastern Chou

One of five plaques of similarly dull, very thin stone like that of the preceding White example. More evenly rectangular (except for chips and breaks), however, and with a "crenellated" silhouette. Perforations centred in each of the four corners. Back plain. Face decorated with two large ornamented and angular S-curved forms, with "C" and parallel-line fillers and connections, and an interrupted incised border. Traces of earth. The notched, rectangular and animal form plaques of thin stone with scratched designs might be compared with similar ones excavated from Eastern Chou burials at Chung-chou-lu, Loyang (CCL Monograph, p. 113 fig. 81:7,12). They were current around 500 B.C.





Two Appliqué Plaques (933.23.219-20). L. approx. 1 1/4" (3.2 cm.). Early Eastern Chou

Dark green stone now partly chalky with calcification. Two of six similar plaques in collection of rectangular form with "crenellated" outline. Smooth polish. No decoration. One face shows preparation in form of gouges (cf. obverse of russet jade plaque above) near the four corners for four conical perforations drilled from the same side. Reverse plain. Traces of earth and red pigment. There is a small axe of identical colour and state of stone in the collection (927.19.253) with rather stereotyped lateral "teeth", and so, possibly, from the same place and time.

Tiger Plaque (931.13.55). L. 4 1/8" (10.5 cm.). Eastern Chou

Published: White, *Tombs of Old Loyang*, pl. CXXV:329

Smoothed but unpolished thin stone plaque of mixed yellow, grey-green and brown tones. Exceedingly thin slice (now rejoined from four or more pieces, with minor chipping) carved in S-curved silhouette of crouching "tiger" with incised borders and body patterns comparable with those on the rectangular plaques above. Additional here is the incised "granulated" area at the rear claw. Reverse plain. No perforations drilled for attachment, as in most of the smaller figural pieces of the (?) set.

Tiger Plaque (931.13.56). L. 4 1/4" (10.8 cm.). Eastern Chou

Published: White, *Tombs of Old Loyang*, pl. CXXXV:329; Hayashi, "Chūgoku Kodai Saigyoku Tangyoku," p. 223, fig. 31:5

Same as above except that the head looks forward and right rear claw and tail show scratched, slanting striations instead of "granulations" and curving lines. A stone plaque comparable with the smaller ones of this "scratched" set was excavated from Eastern Chou tomb 1535 at Chung-chou-lu, Loyang (cf. CCL Monograph, Pl. 81:8).

Pi Form Ring (933.23.103). Diam. 1 3/4" (4.4 cm.). Eastern Chou, late 6th or early 5th century B.C. Published: White, *Tombs of Old Loyang*, pl. CL:359g

Light green translucent jade with gold clouding and a slight dark-shadowed fault on perimeter. Low even polish. Central perforation, drilled from both sides, shows smoothed meeting-ridge. Narrow borders in flat relief. Field carved on both faces with curl-ended, right-angular forms in low rounded relief embellished with incised single- or double-line curves, "eyes," and linear connections. Traces of earth. Comparable *pi*: Eastern Chou tomb 1507 and Eastern Chou 4th period tomb 1316 at Chung-chou-lu, Loyang, Honan (cf. CCL Monograph, Pl. 81:3 and 62:3).

Huang Arc Pendant (915.7.60). L. 4 5/8" (11.8 cm.). Eastern Chou

Light grey-green jade now almost completely whitened with calcification. Flat, bordered faces are decorated similarly with incised, interconnected spirals. "Crenellated" silhouette. Small biconical perforation at centre near top. Traces of earth in crevices.

Pi Disk (930.21.155). Diam. 3 3/16" (8.1 cm.). Eastern Chou

Faintly translucent light olive green, clouded with calcified and amber-to-brown areas. Waxy polish, raised but not sharp borders. Field design on both faces of plastic spirals, many with incised extensions making (somewhat irregular) patterns of juncture. Similar to Chin-ts'un style *pi* disk below but more rounded of edge and lower in polish. Traces of earth and woven material. Reportedly from Chin-ts'un. Comparable with a *pi* form ring from tomb 1 at Ku-wei-ts'un (*Hui Hsien* Report, Pl. 55:4).

Huang Arc Pendant with Dragon-head Ends (929.11.239). L. 3 5/8" (9.2 cm.). Eastern Chou, 5th century B.C.

Semi-translucent grey-green jade with brown tones and calcification especially at the ends. Identical decoration on both sides of fine spirals in relief with linear extensions and connections. Dragon heads have finely incised, striated and cross-hatched detail. Low polish. Neat conical perforation in centre of back. Reportedly from Loyang. Almost identical although longer piece was excavated from Ku-wei-ts'un tomb 1 (cf. *Hui-hsien* Report, Pl. 54:6 and p. 227 fig. 35:5).

Small Pi Disk (933.23.139). Diam. 2 3/8" (6 cm.). Late Eastern Chou

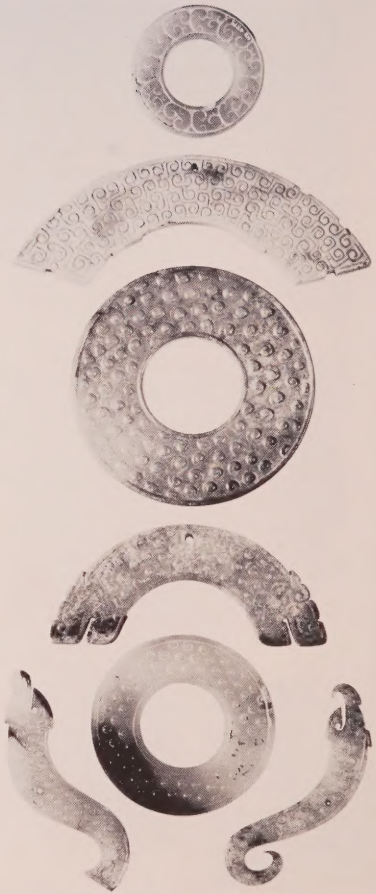
Described on page 82.

Dragon Pendant (931.13.22). L. 3 1/8" (8 cm.). Eastern Chou. Published: White, *Tombs of Old Loyang*, pl. CXXVII:314c

Translucent white jade with amber-to-brown tinges about edges and a low, fine polish. Dragon carved in loose S-curve. Both faces have relief borders and sunken body fields with plastic spirals and S-curls. Roll-snouted head has a most finely incised jaw-border and eye. Perforation in top centre of arch of back, showing that pendant was not designed to be hung in just this way. Assemblage follows Kuo Pao-chün's reconstruction from finds at Liu-li-ko, Hui Hsien, Honan (cf. Hansford, 1968, p. 104 fig. 5).

Bird-dragon Pendant (931.13.51). L. 2 15/16" (7.5 cm.). Eastern Chou. Published: White, *Tombs of Old Loyang*, pl. CXXVII:314a

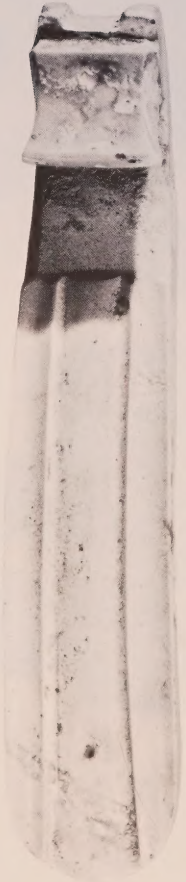
Pale-grey-green translucent jade with white clouding and traces of calcification about edges. Curving dragon pendant with curling tail and beak-extension from snout. Jaws bordered with a band of diagonal striations. Body decorated within borders on both faces with incised spirals variously interconnected. Biconical perforation for stringing at middle of back. Traces of earth and red pigment.

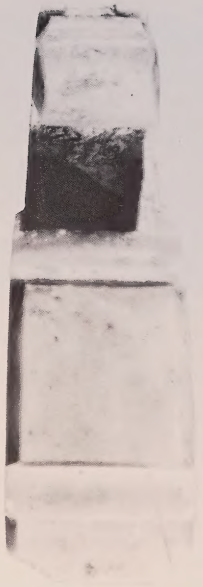


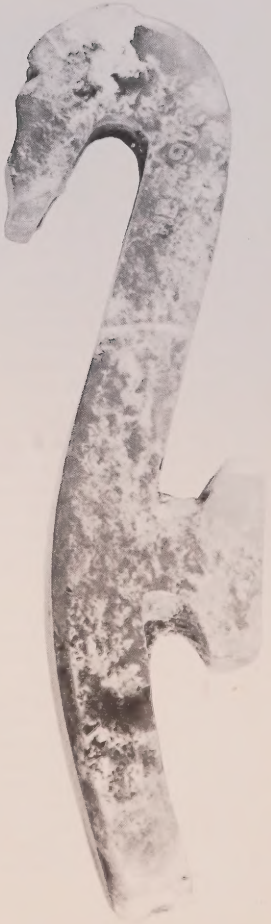
Belthook (933.23.126). L. 4 1/8" (10.5 cm.).
Late Eastern Chou
Grey-green jade almost wholly calcified to an opaque greenish-white still showing, however, the original sharp cutting and fine polish. Thick, elongated, oval-ended plate is longitudinally fluted – the outer bands concave, the centre band convex. Squarish, geometric, animal-head hook. Near-square stud with rounded corners. Incrustations of earth, that on the underside bearing faint traces of woven material. Reportedly from Chin-ts'un. Comparable concave-convex fluting can be seen on an early type of jade scabbard slide in the ROM collection (not illustrated) and on "a rare type" of ovoid bronze *tui* vessel of Late Eastern Chou date in the F. M. Mayer collection, New York, illustrated by Loehr, 1968, no. 68.

Belthook (928.19.148). L. 2 5/16" (5.9 cm.).
Late Eastern Chou
Mottled grey-to-buff stone with almost wholly calcified back and stud. Short, thick, ovoid plate with bevelled edges decorated with two concave transverse bands in relief, widely separated. Geometricized animal-head hook. The square stud has bevelled corners. Incrustations of earth. Cf. "ivory jade" example from Sonnenschein collection in Salmony's work on the latter of 1952, Pl. XCIII:5.

Belthook (933.23.127). L. 3 1/16" (7.8 cm.).
Late Eastern Chou
Pale green, translucent jade clouded with grey and brown and calcified about the edges. Sharp cutting and high, glassy polish of the Chin-ts'un style. Slender ovoid plate has a bevelled rim but is otherwise plain. Geometricized animal head hook appears transversely fluted. Squarish stud has abraded corners toward a more rounded effect. Incrustations of earth. Reportedly from Chin-ts'un.



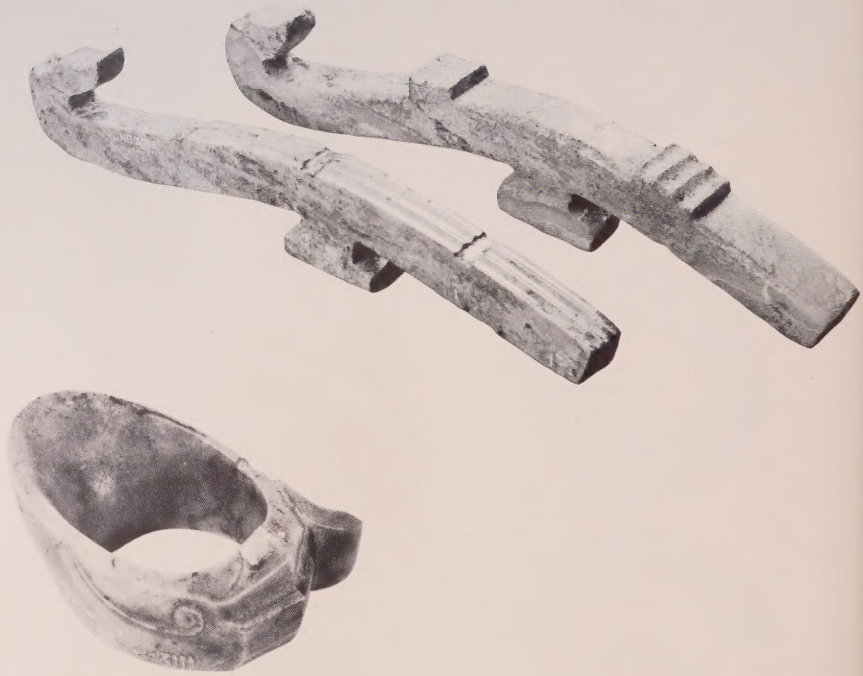




Belthook (931.13.229). L. 6 3/4" (17 cm.).
Late Eastern Chou-Han
Published: White, *Tombs of Old Loyang*, pl. CLII:361a
Mottled white calcified (?) stone, sharply cut and still showing evidence of high polish on the front. Long rectangular plate, square in section, with longitudinal fluting divided in three sections by transverse grooves. Geometricized animal-headed hook. Side of plate flush with side of rough rectangular stud as in 230, not cut in from plate side as in earlier examples. Incrustations of earth and traces of bronze patina.

Belthook (931.13.230). L. 6 7/8" (17.4 cm.).
Late Eastern Chou-Han
Published: White, *Tombs of Old Loyang*, pl. CLII:361b
Faintly translucent white stone with grey veining, now calcified to an opaque buff. Soff polish still in evidence. Elongated rectangular plate, square in section but with bevelled rim, decorated with two transversely-fluted bands in relief. Side of roughly rectangular stud flush with side of plate. Incrustations of earth. Similar if shorter hook from D. Y. Wu Tientsin collection illustrated by Salmony, 1938, Pl. LIX:6, where it is dated Late Eastern Chou by analogy with this Chin-ts'un piece but where it is also compared with Hamada, 1934, Pl. LXXIII:21 from the Tomb of the Painted Basket in Korea.

Archer's Thumb Ring (931.13.313). L. 1 3/4" (4.4 cm.). Early Eastern Chou
Published: White, *Tombs of Old Loyang*, pl. CXXXVIII:337a
Mottled grey-green and cream stone with black markings. Faceted extension at one end with hooked side projection; broad oblique extension toward "lip" at opposite end. Outer wall of ring (on side without hook) decorated with a spiral-ended, curving line in low but clear relief. Cf. bone and spiral-decorated jade thumb rings excavated from Eastern Chou graves at Chung-chou-lu, Loyang (CCL Monograph, Pls. 80:10 and 72:4).



Dragon Pendant (931.13.17). L. 3 5/8" (9.2 cm.). Eastern Chou
Published: White, *Tombs*, pl. CXXVII:313a; Trubner, *Handbook of the Far Eastern Collection of the Royal Ontario Museum*, p. 31, no. 29

Light green jade with amber and brown areas especially at edges. Fine waxy polish. S-curved form with tail and crest extensions, the latter in part a bird image. Perforation at rise to creature's back for stringing. Both bordered faces carved with plastic spirals and finest accessory details — curving striations, cross-hatching, and ledge-like curves in crest (the wings of the bird). Comparable piece in the Sonnenschein collection, Chicago (cf. Salmony, 1952, Pl. LXXXII:4). Probably later pair of jade dragon pendants excavated from Eastern Chou 4th period tomb 2717 at Chung-chou-lu, Loyang (cf. CCL Monograph, Pl. 71:2 below).

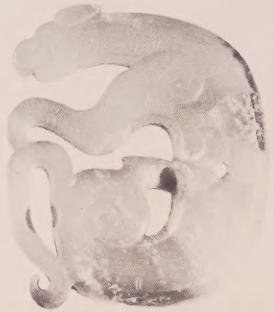
Human Head, Bead or Toggle (960.241.1). Ht. 1 5/16" (3.4 cm.), Th. 5/16" (8 mm.). Eastern Chou (?)

Translucent grey-green jade. A central longitudinal perforation for stringing drilled from top and bottom edge may have resulted in the V-shaped break above at the time of manufacture. The capped mask is flat, with lightest possible modelling. Details such as the slanting eyes and lenticular mouth are rendered in finest relief line. In the elongated lobes of the bordered ears are circular earrings or plugs. The cap is a simple, edged, transverse band, the neck strong and plain. The back appears as a slightly rounded but plain longitudinal bar with "flanges." The style of the piece reflects both Shang China and regional survivals and traditions. Cf. "Early Eastern Chou" chisel-*kuei* tablet in the Freer Gallery with a capped human mask on one face and eagle device on the other in Salmony, 1938, Pl. XXXI: 1, and the strange but fine Sonnenschein mask fitting, ibid., Pl. XXXII:1 — moved back to Western Chou by Salmony in his work of 1952.

Crouching Feline Pendant (931.13.18). L. 2 3/16" (5.6 cm.). Eastern Chou
Published: White, *Tombs of Old Loyang*, pl. CXXVII: 315a; Hansford, *Chinese Carved Jades*, pl. 37a
Mottled green, brown, gold and cream jade, only faintly translucent at thinnest extremities. Fine low polish. Slightly uneven slice of jade, less thick at front leg and tail than at centre. Carved in outline of crouching tiger with a concave border at neck and back, whence it curves into slightly up-turning tail. Lightly rounded flanks are incised with finest scallops, curls, cross-hatched and striated designs, and "scale" motifs. Claws form open rings. Small conical perforation in rise of back. Faint traces of earth and red pigment. Exquisite example of Late Chou animal style, but slightly exotic, the back haunch and leg looking semi-human except for patterning and claw. Cf. bronze cap for weapon shaft excavated at Ch'ang-sha with identical animal style decoration including the concave banding (KKHP, 1959,1, Pl. 13:13).

Coiled Feline, Pendant (931.13.19). L. 1 7/16" (3.6 cm.). Eastern Chou
Published: White, *Tombs of Old Loyang*. pl. CXXVII: 315b; Salmony, *Carved Jade of Ancient China*, pl. LIV:7 "Late Eastern Chou;" Hansford, *Chinese Carved Jades*, pl. 37b
Pale green translucent jade with brownish shadows at curve of back curve and rump and cloud-like buff traces of calcification. Coiled feline carved in openwork. Fine-bordered, slightly rounded body shows a striated, dividing-band flanked by incised scallops, while there are finely cross-hatched designs on neck, shoulder and haunches. Roll-snouted, neat-eared, oval-eyed small head. Finely carved if awkwardly conceived claws. Loop formed by tail shows that a conical perforation was made in its middle. Dents also in hind leg on both faces. Evidence in jade of the influence on Eastern Chou China of the Animal Style of the Eurasian Steppe. Cf. the famous coiled feline of Siberian gold in the Hermitage Museum, Leningrad (illustrated by Carter, 1957, Pl. 4B and elsewhere).

Scabbard Slide (933.23.115). L. 2 3/16" (5.5 cm.). Eastern Chou
Published: White, *Tombs of Old Loyang*, pl. CXL:339B
Mottled light green and grey-brown jade, semi-translucent, with traces of calcification at edges and underside. Slightly curving rectangular plate decorated with régardant, winged and crested feline in low round relief. The few elements of the fine decoration on the animal's body are now worn into near invisibility. Left front claw finely incised on side of plate. Slightly off-centre rectangular slot below has its long edges bevelled on the outside. Incrustations inside the slot show traces of red pigment. Traces of earth in crevices.



Slotted Bar, Bead or Fitting (931.13.46). L. 1 15/16" (4.9 cm.). Eastern Chou, late 6th to early 5th century B.C.
Published: White, *Tombs of Old Loyang*, Pl. CXXXIII:326a

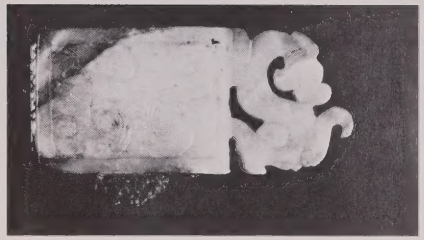
Translucent and highly polished white jade with touches of brown at shorter ends. Perforated through length of flat rectangular form and slotted at centre near one longer edge. Rectangularly notched outline. Intricate decoration on both faces formed about eyed profile dragon heads confronting each other across the slot. Finest linear accents and connections. Traces of earth. Compare intricately carved fitting from Warring States tomb excavated in Hopei (WW, '62, 12, p. 627 fig. 22:5), or fittings from Liu-li-ko 60 (*Shan-piao-chên yü Liu-li-ko*, Pl. 110: 1 and 16, rubbings).

Finial (931.13.317). L. 1 15/16" (3.4 cm.).
Late Eastern Chou
Published: White, *Tombs of Old Loyang*, Pl. CXXXVIII:333

Translucent white jade. Sharp cutting and high polish. Two pairs of perforations from top and lowermost edge to back for attachment (although design and polish are complete on the back). Flat, tiny "standard" with hemispherical top, three pairs of curving "branches" in openwork and, lowermost, a pair of arrowhead-like forms. Saw-scar traces on both faces despite polish. "Rope" band, border, and double-line incising make up the minimal but fine surface decoration. Cf. later but perhaps related gold finial (?) excavated from a Chin or post-Han tomb in Hupei (WW, 1966, 3, p. 62 fig. 2 right).

Knife Guard (?) (931.13.318). Max. Dimension 1 1/2" (3.8 cm.). Early Eastern Chou, late 6th – early 5th century B.C.
Published: White, *Tombs of Old Loyang*, Pl. CXXXVIII:335

Semi-translucent white jade, veined and tinged with amber at edges. Fine sharp carving and high polish of Chin-ts'un style. Rectangular fitting with slightly convex decorated faces, irregularly slotted and surmounted (or sided) by an S-curved animal in openwork. Corroded bronze bar still (diagonally) within slot. Each face of rectangle carved with curvilinear design suggesting profile animal head with round eye and striated features within a linear frame. The subsidiary animal ornament more realistic; lenticular eye and a collar indicated by parallel incised lines. Cf. centre plaque with régardant animal in openwork at edge of famous pectoral or pendant excavated from tomb 1 at Ku-wei-ts'un (*Hui Hsien* Report, Pl. 53:2).

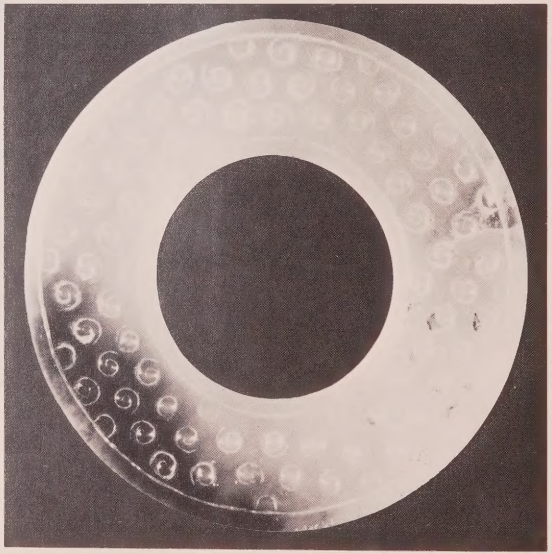


Broken Pi Disk (933.23.77). Diam. 2 3/16" (5.6 cm.).
Eastern Chou
Published: White, *Tombs of Old Loyang*, Pl. CXXII: 306C

Thin, slightly "dented" slice of white jade tinged with gold and brown. High polish. Small *pi* disk broken roughly in half with finely cut, low relief and incised spiral decoration on both bordered faces. Occasional spiral in incised outline only; some have unusually curly "tails." An interesting reminder of old animal motifs is a single incised "eye" near border on reverse. Carved in openwork along top curved *pi* are régardant, sinuous, profile dragons tail-to-tail with etched eyes, collars and striated crests. Slight eccentricities of a design suggest a slightly earlier date for this *pi* than that of the complete spiral *pi* below. Cf. centre section surmounted by régardant animal of splendid sectional pendant or "pectoral" excavated in 1950 from tomb 1 at Ku-wei-ts'un (Hansford, 1968, Pl. 30).

Small Pi Disk (933.23.139). Diam. 2 3/8" (6 cm.).
Late Eastern Chou

Semi-translucent, greenish-white jade with opaque brown shadow at one side, vein at other, and a trace of calcification. Sharp cutting and glassy polish. Up-slanting borders. Field carved with fine plastic spirals, well-spaced and fully formed. Faintest traces only of "basket" pattern from preliminary carving. Traces of earth in crevices. Reportedly from Chin-ts'un. Comparable small disk from a Ch'u tomb of Late Eastern Chou date at Chang-t'ai-kuan, Honan (Hansford, 1968, Pl. 29:D).

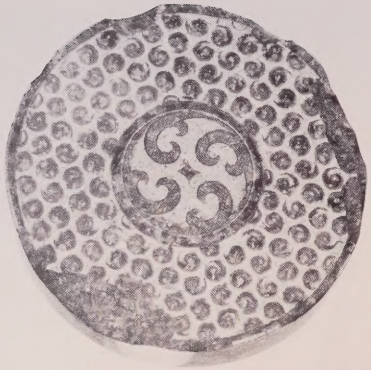


(Broken) Pi Disk (933.23.142). Diam. 11 3/4" (29.8 cm.), Th. 5/16" (.8 cm.). Eastern Chou, 5th century B.C. Published: White, *Tombs of Old Loyang*, Pl. CXXI:304 (fragment of this or identical type of disk).

Mottled grey-green, amber, brown and cream nephrite, semi-translucent. Rejoined pieces of unusually large disk with finest carving and the high polish of the Chin-ts'un style jades. Projecting borders. Sunken fields of both faces prepared by preliminary grid or "basketry" carving for spiral décor in relief, some of the "tail" lines extended and joined in as yet unsystematized patterns. Traces of earth.

Sword Pommel (933.23.114). Diam. 2 5/16" (5.9 cm.), Th. 1/2" (1.2 cm.). Eastern Chou, 5th century B.C. Published: White, *Tombs of Old Loyang*, Pl. CXXXIX:340a

Mottled grey-green, gold and whitish jade, semi-translucent, with sharp cutting and high Chin-ts'un polish. Relatively large and thick disk with sides slightly in-slanting below. Raised rim above and bevelled lower edge suggesting the piece was not for inlay, as in some cases, but was the pommel itself. Top decorated with a wide band of close and fine plastic spirals. Slightly raised centre shows four in-curving forms, sunken and finely cross-hatched, about small hatched lozenge. Lower surface flat and plain but polished, with deep circular groove about the centre. Compare "style II" sword and its fittings from Eastern Chou stage 4 tomb at Chung-chou-lu, Loyang (CCL Monograph, Pl. 67:7).



Tsung (928.12.37). Ht. 3" (7.6 cm.)., W. 3 1/8" (7.9 cm.). Late Eastern Chou

Mottled amber-to-dark brown stone showing calcification on the outside and quite beautiful green areas within the tube. Roughly square and sturdy piece. Thick central cylinder was opened by unevenly-smoothed, biconical boring. Shallow vertical trenches set off the outer corners traditional or necessary to the form. Each corner shows two superimposed geometric masks making eight masks altogether. Each has two striated plastic "headbands," incised circular eyes with brief corner-scores (eyes now nearly worn into oblivion) and simple but finely-etched, bar-form mouths. Cf. mask on russet chisel-*kuei* tablet in Sonnenschein collection with similarly decorated bar-shaped mouth (Salmony, 1952, Pl. LIV:2) and the type of Warring States sword guard mask illustrated in SKT 6, Pl. 266 and elsewhere.

Arc Pendant (953.23.87). L. 9 1/2" (24.2 cm.). Eastern Chou. Published: White, *Tombs of Old Loyang*, Pl. CXXXVII:330a

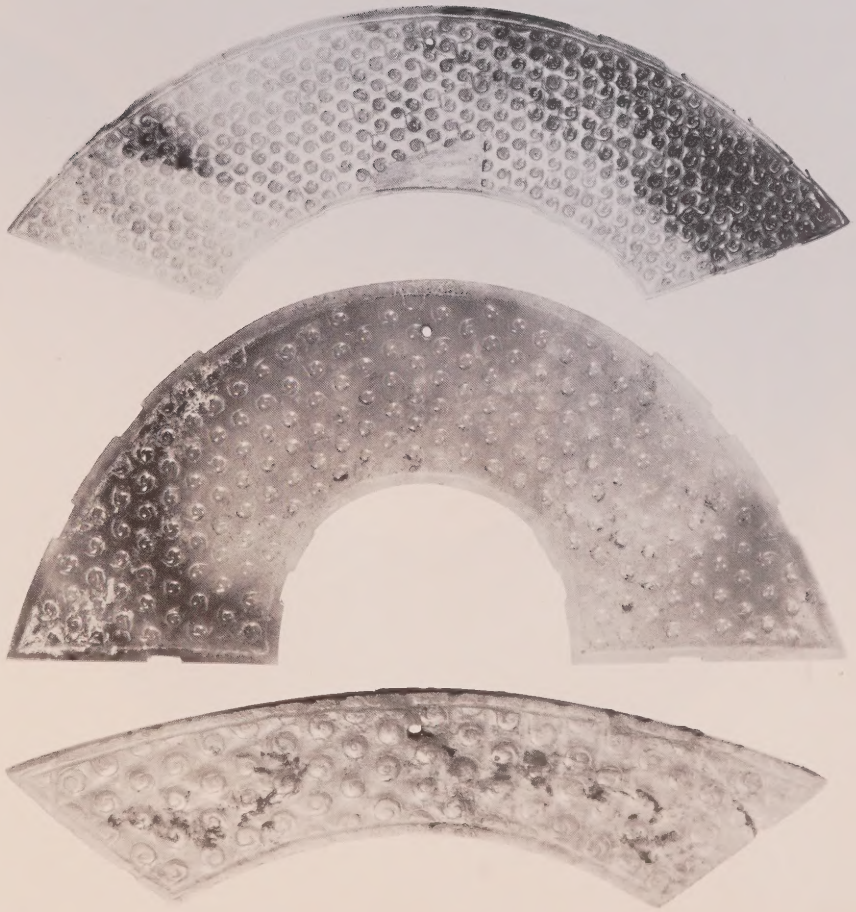
Translucent pale green chlorite with blue-grey-to-blackish diagonal clouding at ends and an amber streak to one side. Black speck inclusions in stone. Low polish. Slanting biconical perforation top centre for probable hanging as chime. Cut-out walls or "crenellated" effect. Borders about fields carved on both faces with spirals and other forms in relief. Fragment of identical arc tested and found to be chlorite. This arc rejoined from four pieces (with a plastic inset at centre below). Similar pieces in Kyōto private and Sonnenschein collections (cf. Na, II, p. 308B and Salmony, 1952, Pl. LXXVII: 1).

Huang Arc Pendant (929.11.238). L. 5 5/8" (14.4 cm.). Late Eastern Chou

Translucent, light, olive-green jade clouded with buff and greyish-brown. Sharply cut edges and high glossy polish of Chin-ts'un style. Adjusted semi-circular arc (ends are wider than top) with "crenellated" outer wall. Small, nearly cylindrical perforation top centre for hanging. Slanting relief borders. Fine, plastic spirals on both faces against faintest "basketry" traces of preliminary carving. Traces of earth, red pigment and woven material. Reportedly from Chin-ts'un. Cf. slightly earlier (?) but similar *huang* arc from a Warring States tomb in Loyang (KK, 1959, 12, Pl. 3).

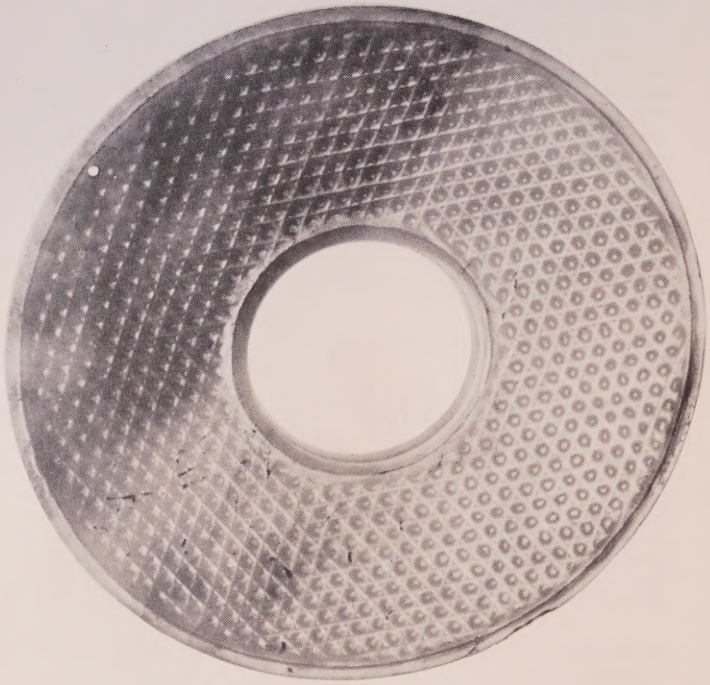
Arc Pendant (933.23.89A). L. 6 3/8" (16.2 cm.). Late Eastern Chou to Han. Published: White, *Tombs of Old Loyang*, Pl. CXXXVII:330c

One of a pair, this pendant has a flatter upper curve, a more pronounced lower one, and broad, upslanting ends. Semi-translucent light green mottled with buff, amber and brown. The low polish left surface pitting. "Basketry"-like grid of preliminary carving is now evident; faces are relatively flat with incised borders. Spirals incised on very low "mounds." Biconical perforation top centre for suspension. Traces of earth and red pigment. Rejoined from three pieces.



Pi Disk Pendant (928.12.56). Diam. 4 11/16" (11.8 cm.). Late Eastern Chou to Han

Pale green translucent jade clouded with brown on one side and with a trace of calcification at opposite edge. Regular round form, relatively thin slice, and fine polish. Borders slightly raised. Field now decorated on both faces with a very fine version of so-called *p'u*, "rush" or "basketry" pattern, there having been no attempt to characterize the small mounds isolated by the crossing grooves with a spiral character as in earlier examples of the type. Incrustation of earth. A tiny biconical perforation was drilled just within the border at one edge for suspension. It is this type of disk which was imitated in early glass. Cf. jade *pi* from Warring States tomb 124 at Ch'ang-sha and another from Western Han tomb 211 (*Ch'ang-sha* Report, Pls. 34:1 and 92:1); stone and glass imitations of this type are known from Western Han tombs at the same rich site in Hunan Province (see KK, 1957, 4, Pl. 10:5).



Pi Disk (931.13.1). Diam. 10 1/8" (25.7 cm.).
Ch'in-Han
Published: White, *Tombs of Old Loyang*, Pl. CXIX:301; Salmony, *Carved Jade*, Pl. XXXIX:2 "Late Eastern Chou"

Mottled green jade, semi-translucent, with black speck inclusions, dark clouding, and traces of calcification. Regularly round form except for dent in stone at one edge. Plain, flat outer borders. Similar design on both faces. Field divided into two concentric zones by low relief "rope" patterned bands. Inner circle decorated with incised spirals on low mounds isolated by criss-crossing preparatory carving. Outer band or border divided into four by hatched radials. Centred within each sector is a "whiskered" *t'ao-t'ieh* mask with split snake-like body curving to either side of head, each body ending in a profile dragon head; the *t'ao-t'iehs* have cross-hatched forehead devices. Traces of earth. *Pi* with perhaps only slightly later design from tomb 9 of the Han colony in Korea illustrated in *Chosen*, III, Pl. 64. Almost identical disk to the ROM one in Tōkyō (cf. Umehara, 1955, Pl. XIII).

Seal (931.13.319). 1/2" x 15/32" x 13/32" (1.3 x 1.2 x 1 cm.). Late Eastern Chou
Published: White, *Tombs of Old Loyang*, Pl. CXXXVIII:336 & CLXXXVII:14 — top, centre

Medium green jade with light veins and amber specks on surface. Rough polish. Approximately square low block with bevelled top edges, surmounted by a small loop. Antique form of character *kung*, "Duke," carved in relief within border on base. Cf. bronze seal from Warring States tomb 260 at Ch'ang-sha (*Ch'ang-sha* Report, Pl. 19:5-7).

Seal (933.23.232). 21/32" x 21/32" x 7/16" (1.7 x 1.7 x 1.1 cm.). Late Eastern Chou or Ch'in
Published: White, *Tombs of Old Loyang*, Pl. LXXIV:187 (topmost of group) and Pl. CLXXXVII:14 — upper right

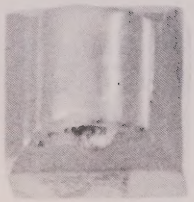
Greenish-white, calcified stone with grey veining and amber touches. Square step-pyramid or ziggurat form has squared apex biconically perforated for stringing. Name (?) character carved out in relief within border on (chipped) base. Cf. step pyramid seal of bronze excavated from a Warring States tomb at Sian with pictographic inscription illustrated in KKHP, 3, 1957, p. 85 fig. 2. Two bronze examples in the ROM are reported to have come from Chin-ts' un.

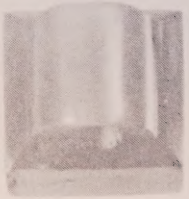
Seal (933.23.231). 5/8" x 9/16" x 7/16" (1.5 x 1.5 x 1.1 cm.). Western Han
Published: White, *Tombs of Old Loyang*, Pl. LXXIV:187 — below, centre

Partly calcified, greyish-white jade with light flecking and minor dark clouding. Small square block carved with two-character name in intaglio. Pyramidal top has conical perforations meeting for stringing in apex (top "eroded" and encrusted with earth). Identical type of seal known from two small bronze examples in the ROM collection. Reportedly from Chin-ts'un. Cf. jade seal from Western Han tomb at Ch'ang-sha (WW, 1957, 8, p. 85 upper right) or Late Warring States — Han seal also from Ch'ang-sha in KKHP 1, 1957, Pl. 18:8. See also Wu Ta-ch'êng, IV, 127a left in a drawing and with an identical legend.

Tsung (928.12.44). Ht. 12" (30.5 cm.). Han or later

Mottled grey-green stone, now mostly grey shading into tan on the exterior. Nine incised geometric masks superimposed on each corner. When viewed with masks right side up *tsung* tapers slightly toward the top (unlike many others). Corners (except for one chipped one) and cutting sharp and even. Projecting cylindrical ends are evenly rounded though thick-walled. Biconical bore meets unevenly in interior. Smooth but not glossy surface. Fairly numerous examples exist of this stone and size but none have been excavated to date.





Seal (933.23.233). 5/16" x 3/8" x 7/16" (.8 x .9 x 1.1 cm.). Han.
Published: White, *Tombs*, Pl. LXXIV:187 below and Pl. CLXXXVII:14 — below, centre

Pale grey-green translucent jade with light flecking, sharp cutting and high polish. Small square block with bevelled upper edge is surmounted by barrel loop drilled through from both ends for stringing. Two to three-character name incised in base. Possibly a pair with the following of identical type although with different first name. Similarly shaped bronze seals in ROM and other collections. Cf. Umehara, *Chosen Kobunka Sokan*, III, Pl. LXI: 157-60. See also *Shao-kou* monograph, Pl. 52: 1-3; KK, '63,9,p.483 fig. 7; WW '58,1,p.45 fig. 19 and '65, 11, p. 55-6; KKHP 1959,2, Pl. 6: 9-10.

Seal (933.23.234). 3/8" x 3/8" x 7/16" (.9 x .9 x 1.1 cm.). Han
Published: White, *Tombs of Old Loyang*, Pl. LXXIV:187 below and CXXXVII:14 — centre

Same as above except for the name.

Water-buffalo (940.103.1). L. 7" (17.7 cm.).
Western Han
Published: Salmony, *Carved Jade*, Pl. IV "Neolithic Style;" Umehara, *Shina Kōgyoku*, Pl. LXV "Reportedly from Anyang"; Na, *Yü-ch'i-t'ung-shih* II.

Half-sitting animal carved in full round from large pebble with a simplified naturalism. Dark stone with whitish veins and gold tinges was given a high, glassy polish. Broadly bevelled cutting to indicate creases at sides of the haunches. Neck and head low-slung from hump of shoulder. Eye and nostrils are summarily-drilled circles. Horns are in round relief, tail in low, flat relief. Incised mouth line and hoof-divisions. Cf. small stone sculptures of pigs, especially the upper right one excavated from a Western Han tomb at Ch'ang-sha (KK 1957,4, Pl. 11:3).

Figure Pendant (915.7.46). Ht. 1 5/16″ (3.3 cm.), Th. 3/8″ (1 cm.). Eastern Han

Gold-coloured stone with green patch at temple. Perforation in top of head meets two others drilled slantingly upward from under each sleeve as in all figures illustrated except the one shown in profile. Capped, robed and bearded dignitary has simply incised eyes, mouth, garment folds and sash; turned-up (?) shoes are outlined. Body roughly triangular in section. Fine though small example of the more highly simplified Han style.

Figure Pendant, from side (931.13.358). Ht. 1 1/16″ (2.7 cm.), Th. 7/16″ (1 cm.). Eastern Han

Mottled green stone. One perforation drilled through centre from top to base. Capped, robed and bearded figure carved in Han abstract style. Eyes, mouth, cap-edge, sleeve folds and (back) sash incised. Cylindrical base, body triangular in section. Some calcification at base. Reportedly from Loyang.

Figure Pendant, from back (928.12.141). Ht. 2″ (5.1 cm.), Th. 5/16″ (.8 cm.). Han

Semi-translucent grey-green jade. Capped, robed and bearded figure is a flattened oval, summarily carved. Eyes, mouth and belt incised.

Figure Pendant (960.241.2). Ht. 2 3/8″ (6.1 cm.), Th. 1/2″ (1.3 cm.). Han

Wholly calcified, opaque white piece, rejoined at the waist. Incised semicircles again indicate shoes, possibly of the type with turned up toes known from Han pictorial representations. Usual inverted-Y-shaped perforation system of this type of toggle. Roughly cylindrical in section. Traces of earth and red pigment.

Figure Pendant (928.12.152A). H. 1 5/8" (3.8 cm.), Th. 5/8" (1.6 cm.). Eastern Han

This figure is one of a pair carved of opaque, blackish, and now quite pitted stone. Each is distinctly triangular in section and summarily carved. They are the most abstract of the group.

Figure Pendant (919.1.22). H. 1 1/16" (2.8 cm.), Th. 5/16" (.8 cm.). Han

Mottled blackish-brown stone. Cylindrical at the base, the body is a flattened oval in section. Eyes, mouth, cap-edge in front, sash-line at rear, shoes and three beard-hairs incised.

***Dancer, Pendant** (928.12.131). Ht. 1 9/16" (4 cm.), Th. 3/16" (.5 cm.). Han or later

Greyish front, dark brown back. Figure flat and small with rounded edges, the proportions top-heavy. Left hip outthrust, right arm curled under to waist, left arm arches over head. The band of the crown and the panel down the centre of the skirt are finely cross-hatched, while the bodice shows incised spiral decoration. The sleeves are the elongated ones of dancing figurines from China in jade and clay. Eyes, nose and mouth in a rather heavy face are incised. The back is carved with spiralling sleevefolds, waist-band and skirt folds. Called "Sung" in the record. Either foreign or fake with reference to Han style. See for contrast the Chinese jade dancers illustrated by Salmony, 1938, Pls. LXI.

Jade Eyebrows (933.23.230AB). L. 1" (2.6 cm.). Late Eastern Chou

Faintly translucent, mottled, grey-green jade with traces calcification. Polished to a high lustre on upper edges and facets. Arc-shaped, sturdy forms with sharp edges below, bevelled ones above. Either used as inlay or as pieces of a burial mask set. Reportedly from Chin-ts'un. A similar fitting was excavated from Warring States tomb 272 at Ch'ang-sha (*Ch'ang-sha* Report, Pl. 35:4).

Pair of Eye Plaques (918.7.143-4). L. 2" (5.1 cm.). Eastern Han

Translucent light green with whitish spots due to impurities or decomposition or both. Low satiny polish in convex front surfaces only. Unevenly lenticular form with tiny conical perforations, drilled from the back, one at each corner. Traces of earth. Reportedly from Honan. There is one other "eye" of this type in the collection, which also includes Eastern Chou grey slate eye plaques either imperforate or with one hole drilled at the centre. An interesting "eye" recarved from a spiral-decorated jade has four perforations. Cf. Umehara, *Chosen* III, Pl. 65:229 from Heijo tomb 9, Korea with cicada, plugs, pigs, etc. See also burial jades from Eastern Han tomb in Hopei (KKHP, 1964, 2).

Cicada (918.7.145). L. 2 3/8" (6 cm.). Eastern Han

Pale green jade, semi-translucent, diagonally clouded with gold-tinged cream. Fine, bi-convex plaque with sharply carved eyes and wing tips. Curving, bevel-incised head, thorax and folded wing lines on upper surface. On slightly more rounded underside are incised crossing lines representing the beak and thorax, five body segment lines below these and converging body outlines. Faint traces of earth in crevices.

Nostril Plugs (927.19.181-2). L. 15/16" (2.4 cm.). Han or earlier.

Mottled, grey-green, partly calcified jade. Tapering and faceted little bars with polished sides and plain flat ends.

Two Body Plugs (918.21.917-18). L. 2 1/2–2 1/4" (6.4 – 5.7 cm.). Han or earlier

Mottled sea-green jade with traces of calcification. Fine waxy polish. Tapering octagonal bars of unequal length. No perforations or ornamentation. Cf. examples from Eastern Chou stage 3 tomb 273 at Chung-chou-lu, Loyang (CCL Monograph, p. 115 fig. 83) and octagonal bars from a Han grave at Sian in Shensi (WW, 1956, 2 p. 70 fig. 3).

Bead (928.12.150). L. 1 9/32" (3.2 cm.). Late Eastern Chou–Han

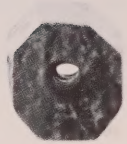
Mottled medium green jade bead of tapering octagonal form. Buff specks and patches. Sharp edges. Biconical perforation just off-centre left thick wall.

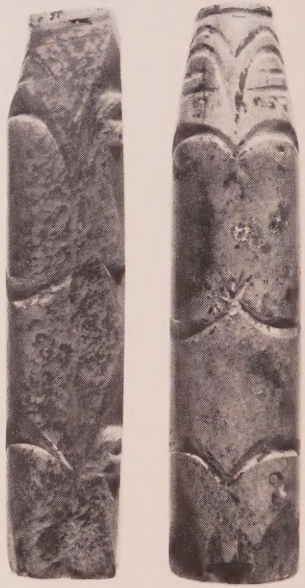
Pig, from side (929.11.83). L. 4 3/8" (11.1 cm.). Eastern Han

Pale grey-green jade, light flecked and amber-clouded with calcification and dulling of the finely polished surfaces. Blunt snout shows two wrinkles. Eye? ear? – score lines. Legs fully indicated on one side only. Same perforations and geometric style as fellow. Traces of earth. Cf. Umehara, 1955, Pl. XCVII jade pig from Han tomb 9 at "Heijo" in Korea.

Pig, from above (929.11.82). L. 4 1/2" (11.4 cm.). Eastern Han

Grey-green jade, clouded with amber and calcification. Polished surface. Rectangular form flat at ends and (uncarved, plain) base; rounded above. Animal has a blunt snout, curving and meeting eye?-lines, flat ears, a small high tail and notched feet. Main body divisions shown by deep, curving, bevel cuts which cross where they meet on the back. Traces of earth in crevices and of fabric (?) on left eye. Small biconical perforations under snout and through tail would seem to eliminate the "weight" or "hand jade" role suggested for the numerous Han pigs in this highly abstract, "modern" style.





Sword Pommel (932.16.114). Diam. 1 13/16" (4.6 cm.). Han

Published: White, *Tombs of Old Loyang*, Pl. CXL:340d (underside)

Light green translucent jade, with brown clouding and calcification at one side. Fine polish, sharp edges, regular form. Top concave or carved to a shallow conical depression with a small circular groove (with arc-scar to one side) in centre. Side walls slant inward. Underside slants obliquely toward light relief central circle in which is the usual deep circular groove for attachment, but there are no perforations. Traces of earth.

Sword Guard (927.19.53). L. 2 1/8" (5.3 cm.). Han

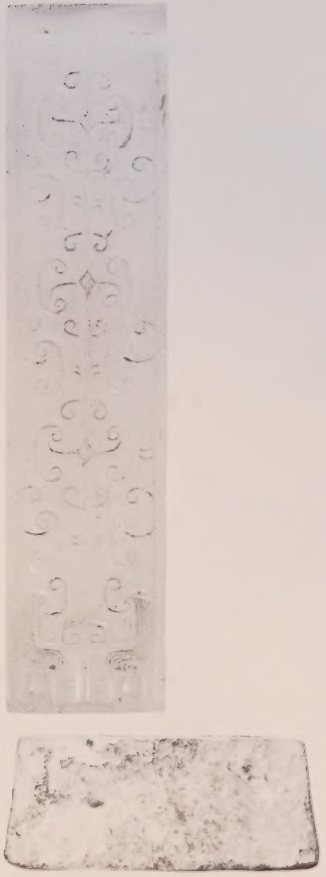
Light green, semi-translucent jade with brown and gold clouding above and on one side. Fine polish. Classic wing-shaped form with angular indentation above where perforated for rod, and a pointed centre below. Lozenge-shaped when viewed from above. Both bordered faces are decorated identically with a broad, carefully depicted *t'ao-t'ieh* mask flanked by inward-pointing T forms. Masks have diagonally-striated brows and claw-parts. Reportedly from Chin-ts'un.

Scabbard Slide (930.21.84). L. 4 3/16" (10.6 cm.). Han

Semi-translucent white jade, except for iron oxide stain on underside of loop. Long rectangular plate with projecting, unequally down-curving ends over an off-centre, rectangular slot. Sharp cutting and high polish associated with Chin-ts'un jade style. Surface decoration of three hatched lozenge-centred motifs composed of relief and incised C scrolls within raised borders and strung along a divided-relief midrib; at one end of latter is *t'ao-t'ieh* mask with striated brows (?) (jaws and tusks indicated by simple incisions on curved edge). Fine example of fully evolved slide comparable with piece excavated from Han tomb at Lo-lang, Korea, 1916, now in the National Museum, Seoul. Reportedly from Western Honan. Cf. slide excavated from Han tomb at Shan Hsien, Honan (KKHP, 1, 1965, Pl. 26:4).

Scabbard Chape (933.23.116). L. 1 13/16" (4.6 cm.), H. 13/16" (2 cm.), Th. 11/16" (1.8 cm.). Han

Light green nephrite, mottled with cream and amber, with considerable calcification. Low and narrow trapezoidal form, lenticular in section. Large, slightly conical bore in centre of top for attachment. Waxy polish. No decoration. Traces of lacquered leather(?) including woven material and earth.



Pair of Belt Plaques (921.21.286-7). L. 2 13/16" (7.1 cm.). Han

Semi-translucent, grey-green stone with opaque brown areas especially at edges and buff traces of calcification. Low polish. Plaque carved with striding (.286) and régardant (.287) dragons in openwork within broad plain borders. Plaques are D-shaped—that is, straight along one edge and curving on others. Designs "readable" with straight edge up. Minimal details of eyes, claws, body divisions, etc. were scratched on obverse only. Rough or provincial but interesting. Cf. openwork ring with dragon flange in Umehara, 1955, Pl. 95 above (Paris collection) shown with generally comparable flanged openwork rings excavated from a Han tomb at Liao-yang in Manchuria.

Fish-dragon Plaque (923.12.126). L. 4 1/8" (10.5 cm.), Th. 1/4" (.6 cm.). Late Eastern Han

Dark green jade, faintly translucent, with touches of amber veining and lighter flecking. Sharp-edged piece polished to a glassy surface. Low-browed, larged nosed dragon with a fanning fin on its back, one brief forward-curling leg and a curling, bifurcated tail. Eye, nostril, fin, leg and tail lines evenly and carefully incised on both sides of plaque. Less highly polished edges plain. Traces of earth. Cf. perhaps somewhat earlier fish-finned dragons of the Szechuan tomb reliefs (Rudolph and Wen, 1951, Pl. 54).

Animal Plaque (928.12.125). L. 4" (10.2 cm.). Late Eastern Han

Soft green jade, semi-translucent, with minor lighter veining and flecking. Vitreous polish. Profile rendition of "crouching" quadruped with tapering head, vertical ear, low-slung belly and bifurcated, up-curling tail. Possibly recarved from disk. Eye, snout, leg and tail lines on both sides somewhat roughly incised. Edges sharp and plain. Traces of earth. Similar to, but less distinguished than, fish-finned dragon above.

Small Pi Form Disk (928.12.140). Diam. 1 3/16" (3 cm.). Eastern Han

Wholly calcified, bone-white disk, possibly inlay for sword-pommel. Top decorated with coiled, "striding" dragon in sharp if flat relief. Reverse has incised borders only. Traces of earth and red pigment.

*__Running Stag, Plaque__ (928.12.127). L. 4 3/4" (12.1 cm.). Eastern Han (?)

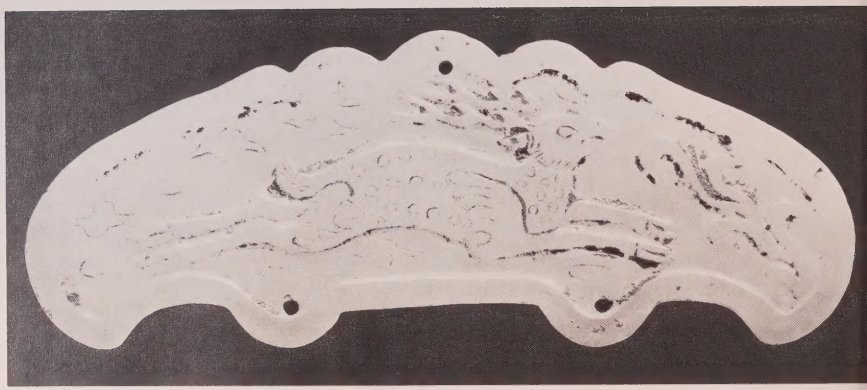
Opaque but fine grey-blue-green stone, faintly translucent only at thinnest edges with some gold-toned mottling on one side. Thin flat slice, complicated in outline, including a pierced space between antler and rump. Plain sides are slightly rounded toward edges. Profile animal is shown in flying leap. Surface detail is minimal, consisting on both faces of almond eyes, a mouth-line, antler-branch-divisions, neck spiral, hoof and haunch lines, and tail-fur lines all done by scoring or careful, single-line incising. The most curious feature is the neck-spiral, suggesting Scythic influence and a north-west or western borderland manufacture. Traces earth and red pigment.

Bracelet, (918.7.136). Diam. 3 7/16" (8.8 cm.), Th. 7/16" (1.3 cm.). Han or later

Light yellow-green, semi-translucent jade with gold-brown veining. Ring rounded on the outside, approximately hemispherical in section. Spaced around the perimeter are eight masks in relief. The bug-eyed, bar-mouthed masks themselves are decorated with finest (now nearly invisible) incised geometric patterns. Even less visible are feathered shield devices incised on the ring between the masks. Said to be from Kuan-ying-tang, Honan Province, and to date from the T'ang Dynasty. For incised shield design compare Salmony, 1963, Pl. VII. Cf. Abbes collection disk with four geometric masks on the perimeter (Salmony, 1938, Pl. XXVIII:2), and a bracelet in the Freer Gallery illustrated in Na, I, Pl. 39 with six cartouches in relief on the outer edge.

Girdle Pendant Plaque (927.19.150). L. 3 7/16" (8.7 cm.). 6th century

Pure and translucent white jade carved into arc-shaped plaque with five scallops at top curve and two semi-circular projections from straighter lower edge. Fine polish. Concave border with raised edges. Field finely carved on both faces with mythical (winged) stag in flying leap in relief surrounded by incised cloud forms and a curving plant motif. Three small, neat cylindrical perforations, — one in central scallop above, the other two accommodated by the two lower projections. All elements of the design existed by Eastern Han times but the vibrant rendering and semi-scenic composition is more reminiscent of the Six Dynasties designs of the Tun-huang caves and others of the post-Han period. Cf. larger and smaller jade girdle pendant plaques excavated from a Southern Dynasties tomb in Kiangsi (KK, 1962, 4, p. 195 fig. 4:1 — 5th or 6th century A.D.).



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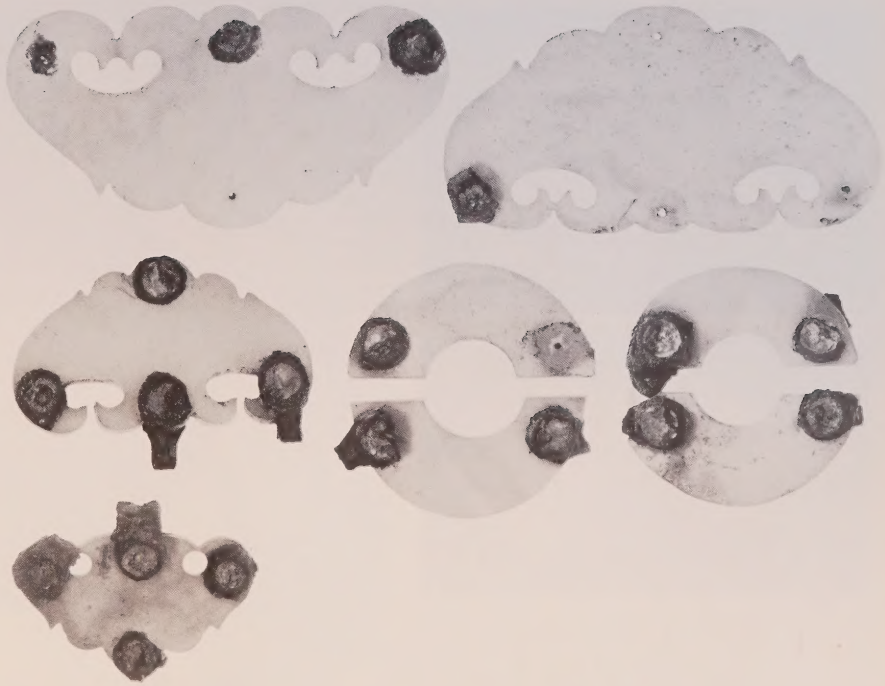
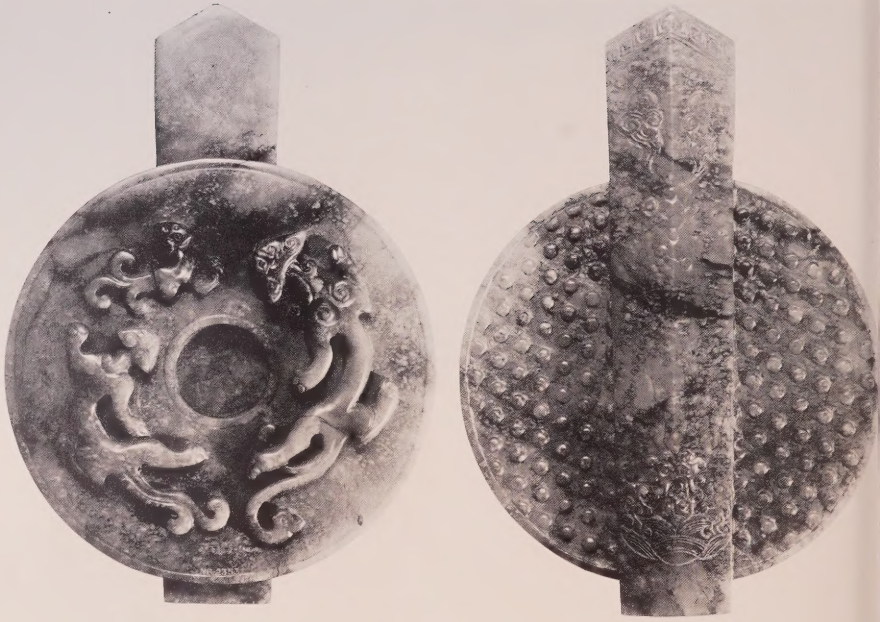
Eight Jade Plaques with Bronze Fastenings
(927.19.274 A-H). T'ang
927.19.274 AB (top) L. 3 1/2" (10.9 cm.); C L. 1 15/16" (4.9 cm.); D L. 2 3/8" (6 cm.); EH (half-*pi*-forms) L. 1 7/8" (4.8 cm.)

Greenish-white jade, translucent and fairly pure, except for buff traces of calcification. Plain but for polish, which did not include edges. Four cusped and cut-out plaques, the two smaller ones being of different size and thickness and so, probably, not a pair. Four half-*pi*-forms match only roughly in size and thickness. Traces of large round bronze nailheads on both sides of plaques, some with whole or partial loops attached. Each of the two largest plaques has a small perforation in its central scallop. Set (?) from casket or girdle. Cf. scalloped and semicircular jade plaques (without bronze nailheads) excavated from T'ang tomb of Princess Yung Tai in Shensi (WW, 1964, 1, p. 22 fig. 31). Sui tombs about Sian yielded related but slightly earlier forms (WW '57,8,p. 66 right and '59,8, p. 7 fig. 13).



Pi-Kuei, 2 views (929.11.53). L. 8" (20.2 cm.), Diam. 5 3/4" (14.5 cm.). T'ang

Pale green, semi-translucent jade, with brown and cream flecking and veining, polished to a low lustre. One face shows mainly the *pi* with simple incised borders and hydra décor in relief against a plain background. The reverse shows the *kuei*, in relief against the *pi* whose back has an all-over plastic "wart" pattern. The *kuei* tapers slightly toward its base and rises to a central midrib. Its pointed top is decorated with a band of meanders, below which is a cloud-borne "moon" and "sun" — inscribed with those characters. Between this interesting feature and an early wave, mountain and spray design below is a stellar pattern. Cf. SBT, China III, pp. 184-5 figs. 444-5 "sun-moon" funerary vases.



Bird, 3 views (921.21.474). L. 2 5/16" (5.8 cm.).
T'ang-Sung

Off-white jade bird-in-the-round with amber veining and surface staining. Rounded head has incised details and round eyes. Slightly arched back, full breast, down-curving tail. Bevel-cut wing design is contained within incised outlines. The ledge-like carving of the tailfeathers shows also on the underside. Considerable claws are symmetrically depicted in outlined low relief on the rounded belly. All parts of the compact small body are clearly set off from one another. Slight openwork occurs at the bend of a flowering branch held in beak (one flower and two buds in relief on each side of body). Cf. mandarin ducks and flower plaque from tomb 100 (T'ang) at Miao-ti-kou (*Miao-ti-kou yü San-li-ch'iao* Monograph, Pl. LXXIII:2). See also Gure, 1964, Pls. 11, 14 and 20 for jade bird sculptures estimated as Late Han to T'ang in date.

Bird (923.24.192). L. 2 7/16" (6.2 cm.). Liao (?)

Swan-like bird carved from a blackish stone pebble (with occasional greyish-white spots) polished to a high sheen. *Régardant*, crested bird with incised wing, tail and body markings holds a flowering branch in its beak. The main body divisions and features are in relief which, like the foregoing, shows a clear delineation of parts. Legs and claws in relief on the underside as well. A curious feature is an extra set of incised (divided) circles between eyes and crest. A hardened and stereotyped version of the preceding white bird. Cf. green jade bird fitting from Liao tomb illustrated in KKHP, 8, 1954, Pl. 213:5; or similarly black with darkish grey "Late Wei-T'ang" crane from the Dennis M. Cohen collection in Gure, 1964, Pl. 24:4.

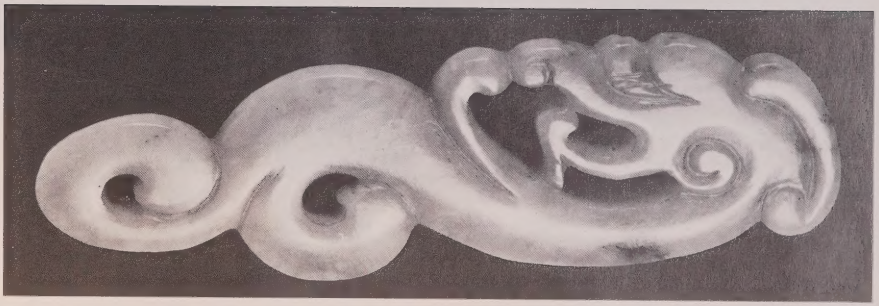
Pi-form Dragon Ring (928.12.59). Diam. 3 3/8" (8.6 cm.). 9th–11th century

Pale grey jade, semi-translucent, with brown and amber tinges at edges and blackish flecking. Narrow, thin ring with waxy polish and rounded edges fashioned into form of coiled dragon. Indented and wavy perimeter accords with features of the design, which is similar on both faces. Profile dragon has prominent eye and curling, striated, awkwardly bifurcated tail. Body decorated with paired spirals, butterfly-wing-like motifs and, at mid-back, a prominent and beautiful fanning device suggestive both of leaf and fin. The ring clearly falls between the fish-dragon plaque on page 97 and the suave dragon (with related horn or crest) on page 105. This, however, leaves us with a thousand-year span. A T'ang or later date is suggested by the "butterfly wings," reminiscent of motifs on a variety of objects from the 8th century treasure-house Shōsōin, Nara, Japan.

Dragon (960.241.124). L. 2 13/16" (7.2 cm.). Sung(?)
Faintly translucent pale grey-green jade with three brown patches and gold tinge at tail. Softly-rounded form and surface show occasional bevelling to advantage. Low polish. Nothing quite like this piece has been excavated. Softness and sense of organism suggest the Sung date.

Mythical Beast (928.12.123). L. 2" (5.1 cm.). Sung
Palest grey-green jade with amber tones especially on the head. Small animal sculpture in the round. Compact sturdy form. Main features and parts realistic and plastic, including a triad of neck-folds. Rounded surfaces ornamented, however, with essentially linear patterns – ear- and jaw-curls, wing and haunch scrolls, claw-lines and fine mane- and tail-striations. Surface slightly pitted here and there. Perforation drilled through right front paw for suspension (as toggle?).

Stag and Hind (918.21.898). Max. Dimension 3 11/16" (9.2 cm.). Sung
Greenish-white nephrite with gold-to-amber shading and with pitted and opaque buff-to-brown areas especially along back of stag. Small, roughly circular sculpture of resting stag with hind, noses pointed toward each other. The stag holds a branch of the fungus of Immortality in its jaws. There is a curling appendage in the opening between the two bodies and a leaf-and-cloud-like design on the hind's body in delicate low relief. Hooves are represented on the underside.



Comb Top, 2 views (927.19.149). L. 3 1/8" (7.9 cm.). Sung

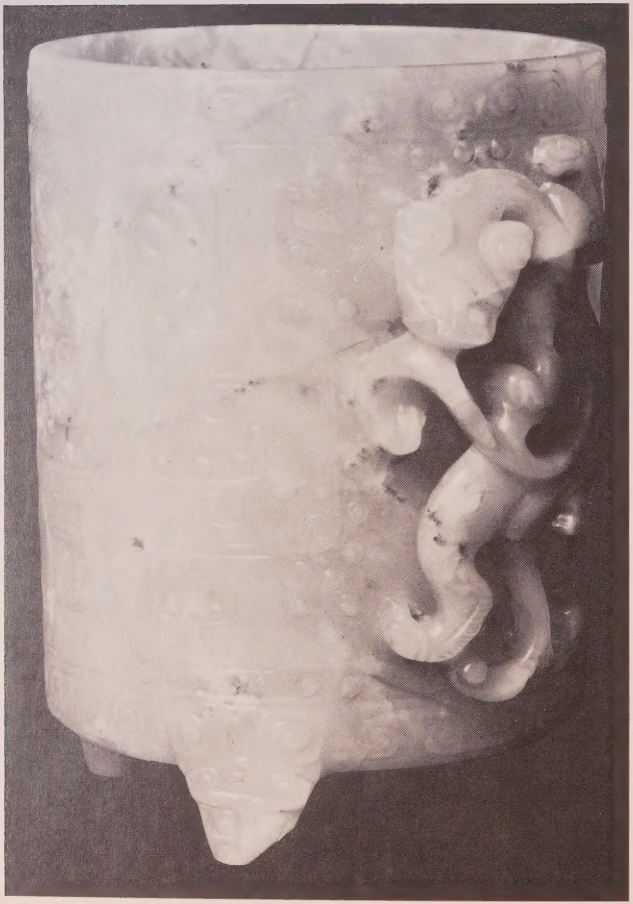
Thin and translucent slice of white nephrite – curved above, straight below, with two rectangular projections for attachment. Variant design carved in convex-concave, low relief on both faces. Both sides show a fanning and spreading lotus leaf with finely- and densely-incised "forking" veins. One leaf supports a pair of finely cross-hatched fish, while the other encloses a flowering lotus. Cf. earlier jade comb top in Stockholm illustrated by Gure in BMFEA, 1964, Pl. 22:2. Closest affinities are with Sung ceramic and metal designs such as that of paired fish in "combed" waves on a Sung bronze mirror illustrated in KK, 1955,6, p. 62 fig. 4.

Pi Disk, 2 views (928.12.60). Diam. 3 1/8" (7.9 cm.). Sung(?)

Light green, semi-translucent, jade disk, veined and specked with amber, brown and white. Incomplete polish allowed surface pitting especially in mottled areas. Straight inner and outer walls. Larger of two creatures crawling counter-clockwise in relief on the obverse is four-legged with a bifurcated tail and was carved in higher, rounder relief. The smaller one is two-legged, triple-tailed, and in lower and flatter relief. Reverse shows an archaistic design of interlocking, spiral-ended "Cs" about hatched lozenges in a four-part scheme. Cf. exquisite, two-dragon *pi* in Neave-Hill collection (*Arts of Sung*, Pl. 98:258).

Cup (927.19.198). H.3 1/2" (8.9 cm.).
13th - 15th century

Semi-translucent "mutton fat" jade with green shadows, brown veining and white flecking. Small cylindrical cup on three animal-mask feet with a climbing hydra carved in openwork in the round on one side. Inside was hollowed and smoothed but not highly polished. Base plain with high polish. Between borders of interlockings "Cs", exterior carved with angular dragon-bands in a field of small plastic spirals. Both "handle" and surface décor follow with considerable accuracy and seriousness a Han version of Ch'u Kingdom art of Late Eastern Chou. This is one of the finest and perhaps earliest of its archaizing kind. It seems earlier, for example, than cup in Pl. 91:264 in *Arts of Sung*.



Yu Bucket Vase (911.8.116AB). H. through handle 8 1/4" (21. cm.), Th. 1 3/4" (4.4 cm.). 13th - 15th century

"Mutton fat" jade, translucent where thin, clouded and flecked with white and with amber patches on all surfaces but especially on one side. Pear-shaped body decorated with rising and pendant blades, confronting "dragons," *t'ao-t'ieh*, masks, "bowstrings" and incised flanges also in a relatively serious archaizing spirit. The cover, with its lobed knob, fits over a lip flange. The bevelled bail handle ends in realistic animal heads slotted underneath to fit over the vessel's neck loops and held in place by jade bars whose ends are covered with inset jade disks suggesting nailheads (one is missing). Complex form in impure stone and modest size suggests, along with the style of the vessel, pre-Ch'ing archaism.

Monkish Figure, 3 views (923.17.218). H. 4 3/8" (11.1 cm.). Yüan(?)

Opaque white stone with silvery-white flecking. Traces of calcification or burning (?) and grey-to-black shading and flecking, some of which appears to be stain. Stiffly erect, frontal figure wears kimono with incised, bevel-cut and relief detail; U-shaped folds over right leg in front, and below the waist at the back. Right hand cupped at breast, left arm pendant, hand hidden in folds of sleeve. Hem curves up to reveal sandalshod feet. Large head with shaven crown shows incised brows in relief (over deep-circled eyes), along with moustache, beard and hair-curls. Three symmetrically-curving wrinkles incised in prominent brow. Two bores in flat base for attachment, with another at the centre of the back between the shoulders. Early "Tibetan style" in China (?) For a similarly stiff and austere vision of the human figure compare with that of the servant boy in the Abe collection painting after Li Ch'eng "Reading the Memorial Stele," in Siren, III (1956), Pl. 149 (probably Yüan).

"Monster" Mask (928.12.182). L. 1 1/2" (3.8 cm.). Ming

Silver-flecked, faintly translucent white jade now mainly bone white with fine dark cracks due to burning (?). Maned, horned, and spiral-browed monster mask with a tusked square jaw and pits for eyes which were probably once inset with glass or stone beads. Square perforation through centre in V of horns. One of two slanting perforations broke open the creature's left jaw. Traces of earth and red pigment. Sides characterized. Back flat and plain. Comparable mask excavated from a Ming grave in the western suburb of Peking (ww, '52, 2, p. 85 figs. 10-11).

Seal (923.17.199). H. 4 1/8" (10.4 cm.), Base 4 x 4 x 1 1/4" (10.1 x 10.1 x 3.1 cm.). Ming (?)

Grey-green jade, semi-translucent, with dark veins and staining on right flank of dragon-grip; traces of rose-tinged burning or calcification at left front corner. Glassy polish. Four-line legend carved in relief into base includes the characters "Jên Tsung," the posthumous name of the Ming Emperor who reigned 1425-6. Transverse perforation through grip more conveniently curved than the straight-through drilling on larger and probably later seals. "Crouch-coiled" dragon of grip has goat-like horns, a striated mane and beard, and plastic cloud (?) curls at the sides between the haunches, the left flank curl attached to neck by a flat band curving down from under mane. Segmented backbone. Probably made for burial of Emperor like several other large jade seals of state with cracked blocks. Most such seals are dated 17th to 19th century – cf. the fine Ch'ien-lung 18th century one illustrated by Hansford, 1968, Pl. 86, clearly made for the delight of the living Emperor and without sign of cracking or burning.

Fu, 2 views (918.21.683). L. 6" (15.2 cm.). Ming

Crouching *fu*, head turned to (animal's) left. Semi-translucent grey jade with grey-to-black veins and areas and an occasional amber vein or tinge. Fine waxy polish. Squat body slightly curved, crouched on hind legs and supported by front. Massive head is squared about the open jaws which show the tongue and very carefully rendered rows of teeth. Finely striated, curling mane, brows and "beard." Flame-like mane design continues along the back and down the flanks to either side of a smoothly knobbed, curving backbone. Tripartite tail, also finely striated, curls round on animal's left haunch. Fully detailed and slightly "faceted" paws; toes and pads indicated with the legs on the underside. Bordered, flat and branching bands decorate the haunches as well as spirals. Three vertical wrinkles on right (convex) flank, and three horizontal breast-folds. Hybrid animal type, concept and decoration. Later or more grossly conceived example included in *Arts of Sung*, Pl. 94:253.

Pi Disk (927.19.268). Diam. 3 7/8" (9.8 cm.).
Ming, 14th - 16th century

Medium green jade, semi-translucent, with darker areas and veins and amber and cream on the back. Waxy polish leaves surface pitting and incidental saw-cuts. Small cylindrical perforation in centre. Main decoration of dragons in waves spills over the whole—i.e., is not confined within silhouette or border. Animal bodies in low relief are illusionistically covered here and there by waves in an interwoven effect. Wave-curls rendered by rough bevelled cuts. Reverse has divided field with bordered "grain" or "basket" pattern about the centre and an interlocking, divided ribbon design in the outer border. A coarse, perhaps slightly later version of the beautiful Yüan or early Ming grey jade disk illustrated by Laufer, 1912, Pl. XXIV.

Hound (918.21.900). L. 7 1/4" (18.4 cm.).
13th - 15th century

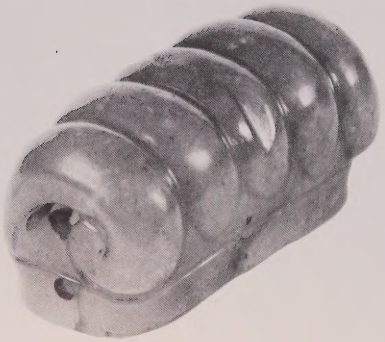
Superb large pebble sculpture of recumbent animal of contained outline, the head turned fully round to the right and resting on the back. Blackish surface with both translucent and opaque green areas especially on right side, head and bottom. Lustrous polish leaves a few depressions and cracks. Ridge of backbone curves from centre of forehead toward tail, while the latter curls to the right. Spiralled small ears point downward, strongly plastic eyes are down-slanting; the muzzle is flat, with curving mouthline and tusks. Paws broadly indicated. Underside plain but for legs; under each paw incised pair of short, in-curving lines. A minimum of decorative accents spark this deceptively simple, organic, almost rhythmic conception.

Ornamental Axe (910.207.6). L. 5 3/16" (13.1 cm.). Ming (?)

Grey-green stone shading into tan with gold tinges; only faintly translucent. Fine waxy polish. Slightly flaring rectangular blade indented to set off elaborately carved tang with central cylindrical perforation. Low relief and incised decoration on both faces of hydra cavorting in clouds – three animals on one side, two on the other. Cf. the yellow green and brown jade carved rhyton in the British Museum with an inscription of 1789 in *Arts of Sung*, Pl. 89:275.

Hair Fastener (931.13.226). L. 2 7/16" (6.2 cm.). Ming

Thinly cut and finely polished piece of grey-green translucent jade (white flecked and with amber veins). Hollow ovoid hair fitting (minus pin) shaped like a banded, back-scrolling, five-lobed cap, the central lobe being "dented" front and back to suggest softness. Sides cut out to show scroll ends and perforated in base band for barette. Reportedly from Loyang. Related piece from Gure collection dated Wei by Salmony, 1963, Pl. XXXVII: 4; from Bahr collection dated T'ang by Laufer in 1927 (Pl. VII: 2); cf. silver piece excavated from the Yüan tomb in Kiangsu (WW, 1964, 12, p. 57 fig. 11-12) and gold one from Ming tomb at Nanking (KK, 1962, 9, Pl. 5:1).



Lotus Leaf Cup, 2 views (927.19.211). L. 5 1/4" (13.3 cm.). Ming

Oyster white jade, semi-translucent where thin, tinged with gold and grey and with amber about the rim. Small ovoid cup in form of lotus leaf shows a dominant concern with organic naturalism. Plastic-dotted, rounded stem curls about centre of base and up one side, while a dragon or hydra in relief climbs lipward at the other. Emerging (somewhat magically) out of leaf as out of cloud on one of the long sides is a smaller dragon-head and claw. The whole has a waxy lustre except for dulled and greyed areas just inside the undulating (and at one point re-finished) rim. Cf. earlier cup also with plastic detail on underside (leaf) excavated from a Yüan Dynasty tomb in Kiangsu (ww, 1964, 12, p. 58 fig. 17). See also possibly contemporary Bishop lotus of grey and brown nephrite and dark green jade bowl with waves swirl carved in relief out of the base from the Vetlesen collection in the Smithsonian, both dated Ming by Hartman, 1969, Pls. 3 and 8.

Vase (911.8.120). H. 6" (15.2 cm.). Ming

Yellowish-green, semi-translucent stone clouded with brown on one complete side. Thick-walled cylindrical container "supported" by three hunched, standing bears carved in the round. Polish dull especially on the interior. Raised base is flat and plain except for minor pitting and white scratches. Exterior carved in three registers with plain relief borders. In the upper register are two *t'ao-t'ieh* masks alternating with two dragons (spike-spined and two-headed) against a carefully carved *leiwen* background. The bottom register shows three profile birds (between the bears), against the same *leiwen* ground. The middle and main décor consists of *t'ao-t'ieh* masks in four columns of two and a half masks each, between which are additional curvilinear motifs with hatched half-lozenges below. The form of the vessel including its bear feet echoes that of Han cylindrical containers. Its decoration is a play on Bronze Age themes. The broad bevelled carving in the middle register has a similar effect to that of Ming Dynasty *guri* lacquerware – which goes back in turn, to Sung and Yüan hammered metalwork. Gross but interesting piece, certainly not nephrite.

Boy with Cat (923.17.196). L. 2 3/16" (5.6 cm.).
18th century or earlier

Polished, opaque, ivory-coloured stone with fine brownish veining. Small but fine pebble sculpture of boy, cat and leaf. The boy has a striated double "bun" of hair tied with ribbon atop his broad crown and wears a loose jacket and trousers. He sits on the leaf, the stem of which he holds in his raised right hand while his left is out to meet the cat's nose. Almost the whole back is a loving depiction of the great leaf, its main and branch veins in faint relief. The cat's tail and paw make loops for possible stringing as a toggle.

Small Boy in Large Leaf (922.20.120). L. 3" (7.6 cm.).
Ch'ing, 19th century

Pebble sculpture showing white nephrite boy comfortably sandwiched between the edges of a large leaf, the latter with surface of mottled amber due to a late and sophisticated use of the "skin" of the stone for the two-tone representation. Resting boy, round of form and face, is clad in a loose suit with finely hatched sleeve-edge and a Ch'ing star pattern on his trousers. The brown leaf is polished, with incised veining and a serrated edge, but is not as meticulously detailed as the "ivory" leaf of the boy with the cat.

Figure with Scroll (923.17.133). H. 3 1/8" (8 cm.).
Ch'ing, 18th century

Snow-flecked, semi-translucent white jade with amber tinges especially on the sleeves and bluish-grey clouding above (black speck inclusions in grey areas top and back). Fine polish. Folk rendering of priest or dwarf in trousers and a full-sleeved robe holding a scroll before him. Incised pattern of embroidered (?) neck-scarf visible on the back. Hair, shaven in a circle on the crown of the head, is bound with a curl-ended band. Carved in the centre of the scroll is a *yin-yang* symbol.

Chimera with Young (911.8.114). L. 7 1/4" (18.4 cm.). Ch'ing, 18th century

Large, fine pebble sculpture of pale greenish-white jade, translucent where thin, with white clouding, amber patches, and veining incidental to the design rather than eliminated or used to enhance it, as in the case of the brown leaf. Large régardant animal has hooves, goat-like horns, an up-turned, four-part tail and a long, fungus-bearing, leafy branch in its jaws. The cub, with a tendril from the same "fungus of Immortality" in its smaller maw, climbs and paws the parent. Both the animals and the conception here are hybrid—in parts carefully realistic, as in the hooves, partly imaginary, as in the flame-like designs incised on the haunches.

Hu Vase (921.21.300AB). H. 12 1/2" (31.7 cm.), Th. 3 3/4" (9.5 cm.). Ch'ing, 18th century

Mottled and veined spinach-green stone with lighter and darker green and reddish-brown areas. Fine polish left some pitting, especially on the interior. *Fang hu* form, rectangular in section, with slightly convex sides. Vessel curves to and from shoulder and lower angles. Slightly flaring, banded foot. Cover in form of truncated pyramid surmounted by an open rectangular "knob". Ornate surface carving in low relief characterized by a subtle interplay between slightly concave and slightly convex, sharp-edged, curvilinear forms. Neck ornamented with vertical fish paired in petal-like, overlapping panels. Shoulder band shows birds in panels separated by divided bars (cf. Eastern Chou paired-triangle dividers on bronze vessels). Main decoration in central body band consists of four ornamental *t'ao-t'ieh* "monster" masks; below are more pendant panels with paired fish. Foot plain. Handle loops to either side of neck have fabulous, horned animal heads carved in the round with rectangular knobs projecting from foreheads. Cover ornamented with eight birds in panels, two to a side. Reference in form and décor is to almost the entire Bronze Age repertoire with the absence, however, of any *leiwen* or meander band texturing.

Lotus Leaf Dish, 2 views with stand (921.21.83 AB). L. of dish 10 1/2" (26.6 cm.). Ch'ing, 19th century.

Translucent white jade, highly polished. Elongated lotus leaf with wavy, up- and in-turning scalloped edge. Singly incised linear veins on interior, double-line ones on exterior. Smaller overturned leaf with frog and lotus flower is attached to main dish by stems carved out of base in the round with other leaves and veins, while a leaf-entwined bird graces the opposite end of the long axis. Refinement and skill represented in dish more than complemented by the carving of its brown wood stand, whose upper layer is in intricate openwork depicting lotus stems, leaves, flowers, buds and seed-pods.

Two Fu (923.17.202). L. 3 9/16″ (9.1 cm.).
Ch'ing, 18th century

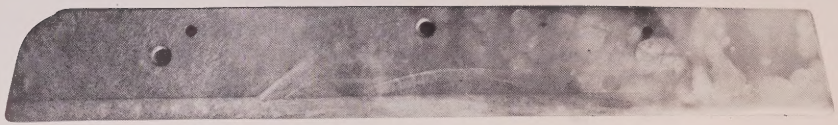
Opaque white stone with silvery flecking, grey-to-black staining, and fine cracks and mauve spots which suggest burning. Animal group, possibly carved from antique hand-axe, composed of two mythical beasts, one reclining and one crouched, heads meeting at jaws in which each holds an ornate and formalistic frond. *Fu* have curling brows, leaf-like ears, sweeping and finely striated manes; tails represented among other details below in densely-striated, low-relief swirls. Despite formalism of decorative detail, the whole is fitted with extreme cleverness into the shape of the pebble or axe. All views show equal care in detail though the main view is from above. Probably from same time and workshop as the following, although slightly finer workmanship.

Lohan with Lion (923.17.208). Max. Dimension 3 1/4" (8.2 cm.). Ch'ing, 18th century

Opaque, ivory stone with olive-to-black veins and staining (especially on back) polished to waxy lustre. Witty pebble sculpture of a genial monk wearing a cloak, his right hand on head of a *fu*, his left holding the mythical lion's brocaded ball. Figure characterized by finely-striated curling hair, moustache and beard, with a band about the crown of his head ending in two spirals on the forehead. *Fu* has a curling mane, chest folds, haunch patterning and a bell or tassel on a cord about its neck. Folds of cape cover figure and most of *fu* at rear. Feet and paws carefully rendered below. "Buddhist monk and lion cub" in different style and of inferior workmanship was estimated as Late Sung by Gure, 1964, Pl. 34:1. The 18th and 19th centuries saw a fair number of representations of this semi-Tibetan style of priest or genii, some with *fu*, some with bottle out of which, in pictorial examples, bat (=happiness) enclosing smoke issues.

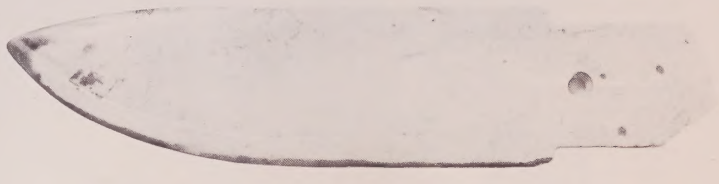
Ceremonial Blade (928.12.40). L. 18 1/2" (47.1 cm.). Late Ch'ing

Calcified amber and brown stone at one end, still translucent green, clouded with gold and white, at other. Long trapezoidal blade with straight cutting edge bevelled from one side only. Four conical perforations drilled from alternating sides, three along spine, one centred nearest rounded end. Edge of latter shows pitting. Clear scars of circular saw-cuts on both faces. The stone, typical of many large "ritual jades" with circular saw-scars and other suspiciously late marks, is antigorite. Ex. Wu Ta-ch'êng collection.



Ko Dagger-axe (950x254.5). L. 12 5/8" (32 cm.). Late Ch'ing

Opaque, "calcified" stone — whitish with brown edges and spots on one face, a mottled buff colour on the other. A smooth polish left surface cracks. Plain tang, with diagonal butt broken off at one corner, has a conical perforation drilled from whiter side. Head of blade decorated on both faces with a transverse band of finely incised criss-crossing lines. To the left of this pattern on the whiter face is a one-line inscription in Shang style which, however, is as spurious as the shape of the blade. The latter is nearly straight and quite blunt above with a sharpened lower edge curving up toward the tip; the sharper edge was not only bevelled but bordered by an incised line. Archaistic. Cf. genuinely early piece from the Winthrop collection (*Winthrop Retrospective*, no. 3).



Pi Disk (928.12.43). Diam. 7 3/16" (18.4 cm.). Late Ch'ing

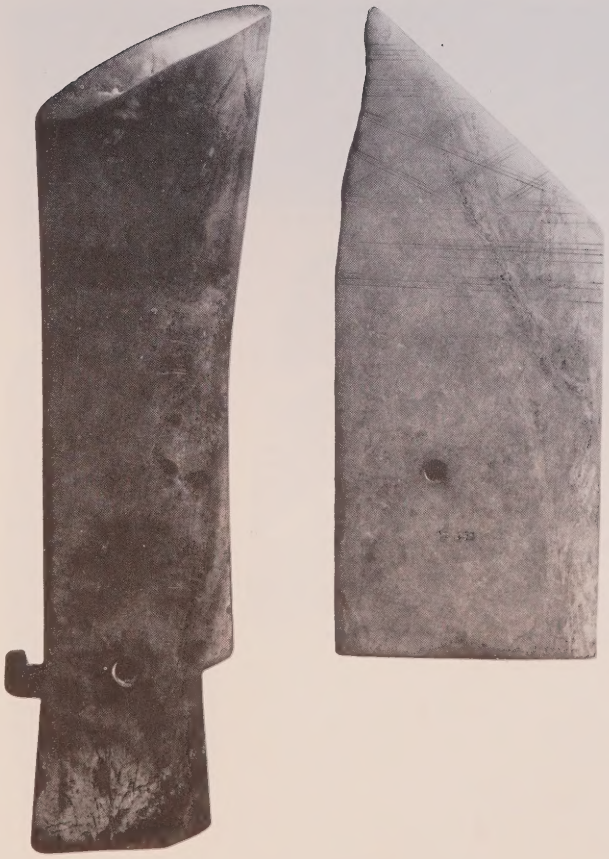
Unevenly thick slice of mottled grey, amber, brown and cream jade. "Conical" perforation (with *concave* wall) drilled from lighter, or more decomposed, side. Darker face shows traces of a circular saw at two edges, while the perforation also suggests a late tool kit. Fine glossy polish where stone not pitted or debased. No decoration. Purchased by Bishop White from the Wu Ta-ch'êng collection.

Chang Sceptre (928.12.192). L. 14 1/4" (36.3 cm.).
Late Ch'ing

Chocolate brown opaque stone with golden-brown spots and whitening on both surfaces. Massive form falls between that of the classical chisel-*kuei* (see slanting convex cutting edge at top bevelled from one side only) and *chang* sceptre (with only one large, plain and hooked lateral projection between blade and tang). Conical perforation drilled from side with bevel. Circular saw-scar on reverse. Ex. Wu Ta-ch'êng collection. Closest to this "*chang*", perhaps, is a drawing of a dark green and white ritual jade shown by Laufer, 1912, p. 102 fig. 35.

Ko-kuei Tablet (928.12.42). L. 9 3/4" (24.7 cm.).
Late Ch'ing
Published: Wu Ta-ch'êng, *Ku yü t' u k' ao* I, Pl. 19; Laufer, *Jade*, 1912, p. 101, fig. 34.

Light brown stone, translucent only at thinnest edges, with darker veining and dull but fine polish which, however, leaves large pitted areas on reverse. Short tablet with asymmetrically pointed top. Stone abraded to thin edges above except where pitted. Rectangular base. Conical perforation drilled off-centre from scarred and pitted side. Decoration of incised(?) wire-fine, straight and criss-crossing lines apparently rubbed to near-invisibility in spots through wear. No trace of circular saw. Purchased by Bishop White from the Wu Ta-ch'êng collection. Similar piece from Beasley Bequest to the British Museum (cf. Jenyns, 1951, Pl. XII, right – also of honey brown stone and "eccentric" shape).



Bead (932.16.197). L. 1 1/32" (2.6 cm.), Max. W. 23/32" (1.8 cm.). Late Shang (Anyang Period)

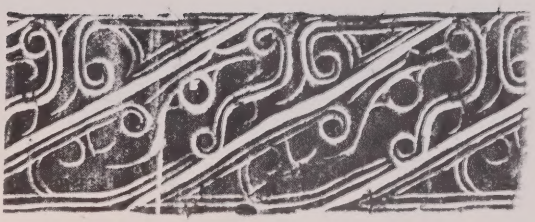
Grey-green jade now chalky with calcification. Flaring tubular form decorated with raised flat border about wider end, followed by encircling "bowstring" and pendant triangles in linear relief. The neat, wide, conical perforation is off-centre. Reportedly from Northern Honan. The bowstring-and-blade design is common on Late Shang and Early Western Chou jades, sometimes in combination with the *t'ao-t'ieh* and profile dragon motifs which are the major ones of the period.

Bead (931.13.336). L. 1 5/16" (3.3 cm.). Yin-chou

Translucent white jade fashioned into uneven ovoid cylinder with biconical perforation widened considerably at one end. Decoration on 2 faces of opposing pairs of diagonally twisting snakes with triangular faces and lozenge-patterned bodies in linear relief. Traces of earth and red pigment. Reportedly from Anyang.

Bead (928.12.113). L. 1 1/16" (2.7 cm.).
Middle Western Chou

Light green calcified jade. Broad, uneven cylinder with wide perforation drilled from two ends leaving relatively thin wall. Wall shows traces of cutting and shaping. Décor of diagonally encircling dragon-bands (there are two profile heads) in curvilinear style with combined incising and bevel-cutting. Traces of earth and red powder. The incised and bevel-cut style of carving discernible here is related to a Middle-to-Late Western Chou jade style anchored in time now by two arc-shaped and flanged small plaques with curvilinear designs excavated from P'u-t'u-ts'un and Chang-chia-p'o, both Sian sites in Shensi Province (cf. Hayashi, 1969, p. 173 fig. 7:5).

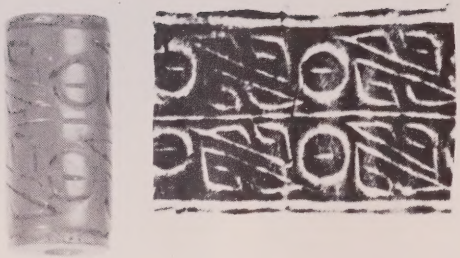


Bead (921.21.496). L. 1 15/16" (4.9 cm.).
Late Western Chou

Pale green jade, semi-translucent, with traces of calcification. Tapering, unevenly ovoid form with uneven ends, one of which shows a linear scar. Relatively narrow biconical perforation. Decoration in encircling diagonal bands shows two profile dragons: one crested and scaled with hooks for "arms"; the other with a different crest, claws and (probably) feathers; dragon eye-types also vary. Curvilinear style utilizing combination of incised and bevel-cutting. Traces of earth and red pigment.

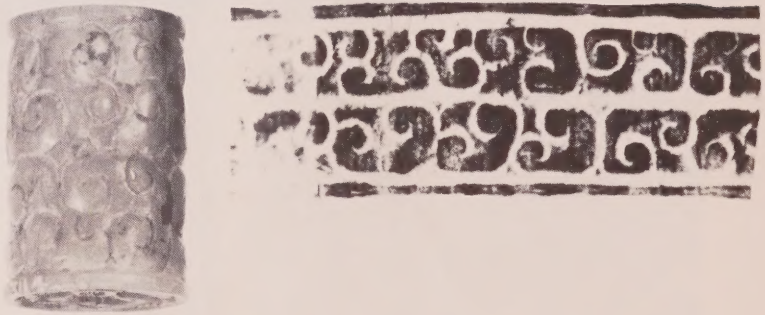
Bead (931.13.34). L. 25/32" (2 cm.).
Early Eastern Chou

Yellowish-green translucent jade. Slightly uneven cylindrical form with uneven perforation drilled from both flat ends. Exterior decorated in two registers with two panels of angular geometric motifs alternating with two of "eyes" or divided circles. Design and upper and lower borders all simply incised. Traces of earth and red pigment. Reportedly from Anyang. The so-called "eyed band with diagonals" goes back to the late Neolithic Painted Pottery in China. This simply cut, not to say dried, version of it is most akin to designs discovered at the Kuo cemetery site at Shang-ts'un-ling, Honan, c. 8th century B.C.



Bead (931.13.316). L. 15/16" (2.4 cm.).
Eastern Chou c. 500 B.C.

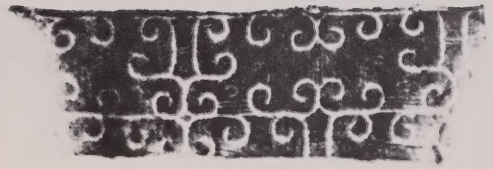
Pale green jade, semi-translucent, with traces of calcification. Outer wall carved in roughly two registers with plump, angular, spiral-ended forms, some with an incised spiral in the angle as well. Four "eyed" interstices and joinings composed of parallel incised lines. Slightly concave ends decorated similarly (about ringed, perforated centre and within raised ring borders) with the same spiral-ended forms. Small perforation drilled through cylinder from two ends. Incrustations of earth. Reportedly from Chin-ts'un.



Bead (931.13.45). L. 1 5/8" (4.1 cm.), Th. 9/16" (1.4 cm.). Eastern Chou c. 500 B.C.
Published: White, *Tombs of Old Loyang*, Pl. CXXX III: 326b.

Pale green, semi-translucent jade with amber-to-brown patches and veins and tan traces of calcification. Ovoid silhouette (truncated at ends); a flattened barrel shape in cross-section. Perforated from two ends through centre for stringing. Ends polished but plain. Exterior décor divided in halves and bordered by finely and digonally-incised, rope-like bands, two at the ends, one about the centre. Above and below centre "rope" are two less clear registers, the outer-

most carved with four pairs of curvilinear motifs back-to-back, the more central ones with similar forms with finely-hatched lozenges between them, and features which suggest profile animal heads incised in and about the geometric repeats. Fine form, detail and polish. Probably roughly contemporary with a finely fluted barrel-bead (R. Bensabott, Inc., Chicago) illustrated by Salmony, 1938, Pl. LVII:7.



Bead (928.12.155). L. 9/16" (1.4 cm.).
Eastern Chou, 5th century B.C.

Clouded white jade, lightly veined with brown. Small neat perforation through squat cylindrical form. Ends of cylinder polished but plain. Outer wall finely carved with pairs of confronting profile dragon heads surrounded by C-scroll and spiral forms, here and there connected by pairs or sets of finely-incised parallel lines. No longer is there a division of decoration into "halves" or "registers"; it is unified. Cf. central cylindrical link in beautiful Winthrop fitting in the Fogg Art Museum, Harvard, illustrated by Hansford, 1968, Pl. 37C and elsewhere.

Bead (921.21.480). 1 1/16" x 1" (2.7 cm. x 2.5 cm.).
Ch'in-Han

Translucent pale green jade with minor white clouding; decomposed patch on one face. Fine cutting and polish. Square, flat form. On both faces there is a smaller, slightly convex square in relief. From deep notches in two opposite sides the centre of the bead was biconically perforated for stringing. Traces of earth. Reportedly came with 20 small glass, jade and stone beads and an agate drop. ROM square bead 933.23.109 illustrated in White, *Tombs*, Pl. CXXXVII: 331d is identical but smaller. A similar bead was excavated from tomb 1004 at the rich Shao-kou site, Loyang (cf. *Shao-kou* monograph, Pl. 64:3).

Marble Cicada (935.6.1). L. 2 1/16" (5.2 cm.).
Late Shang (Anyang)

Small marble sculpture of insect conceived almost in full round with smooth finish and simplified but realistic detail. Eyes, wings, bevelled body and legs (or underside) in relief, while head and thorax divisions are incised. Bevelled sides; no body segments indicated. Beak in relief on underside shows an early concern for realism in its incised criss-cross pattern. Probably funerary but not carved as tongue-piece like flatter Han Dynasty stone and jade cicadas. Traces of earth and red pigment. Reportedly from Anyang. Two comparable marble cicadas were excavated from royal tomb 1001, Anyang (cf. *1001*, Pl. XCV: 4ab, 5ab, and Pl. XCVIII: 3, 4).

Cicada (928.12.159). L. 1 11/16" (4.3 cm.).
Late Shang (?)

Almost identical to the marble cicada of Anyang type except for additions to, and character of, linear detail, omission of the incised pattern on the beak (in relief on the underside), and the material, which in this case is a translucent green stone, probably fluorite. This small cicada sculpture is one of an interesting group of fluorite objects which may have served in Shang or slightly later times as jade substitutes.

Cicada with Blade, Pendant (947.31.24). L. 1 1/8"
(2.9 cm.). Yin-Chou

Mottled buff colour due to almost complete calcification. Triangular or wedge-shaped insect with body extended beyond wing tops into a short blade with slanting edge. Conical perforation drilled from below through ridge beneath head. Eyes, ring of first thorax segment, and folded wings in light relief. Traces of red pigment. Reportedly to be from Anyang.

Cicada Fitting (925.26.361). L. 7/8" (2.2 cm.). Western Chou

Greenish stone (?) now calcified and opaque. The slightly curving, roughly rectangular plaque is concave below, convex above. Outline cut out at head end only. Eyes, ridge-beak and two thorax rings in relief. The folded wings are indicated by curving incised lines while the tail end is straight and flat. Underside plain. Incrustations of earth and red pigment. Reportedly found with the Hsin-chêng bronzes. Similar insect excavated from Western Chou grave in Shensi (cf. *Fêng-hsi* Report, Pl. 85:4).

Cicada Pendant, 1 of a pair (932.16.17). L. 1 1/8" (2.9 cm.). Western Chou

Mottled, opaque, cream and golden-brown stone. Pair identical in size, shape and detail. Upper and undersides identical as well, except undersides bevelled at rear edges. Flat, roughly rectangular shape subtly adjusted for main features, including the curving wing-bevels which make the insects appear biconcave when viewed from their (thin) sides. Eyes in low flat relief. Thorax and curving outlines of folded wings incised. Neat biconical perforations through pointed beaks for stringing. Traces of straight saw-cutting, earth and red pigment. Reportedly from Northern Honan. A cicada in similar style was excavated from Western Chou tomb 20 at Hsin-ts'un, Hsün-hsien, Honan (cf. *Hsin-ts'un* monograph, Pl. 102:6).

Cicada Bead (931.13.42). L. 1 1/4" (3.6 cm.). Eastern Chou

Mottled green-brown jade almost wholly buff-coloured due to calcification. Three-dimensional insect has projecting eyes, striated "collar," incised body segments, and faceted, folded wings delicately incised with longitudinal and transverse lines. The underside curves upward toward the tip at the back, as it does in the actual insect, and shows an incised beak, legs and body segments. Biconical bore through whole for stringing. Reportedly from Northern Honan. In Salmony's work published in 1963 is illustrated a near-twin "Late Eastern Chou" cicada from the J. W. Alsdorf collection (Pl. XXII: 4).

Cicada Plaque (934.17.232). L. 3 11/16" (9.3 cm.). Han

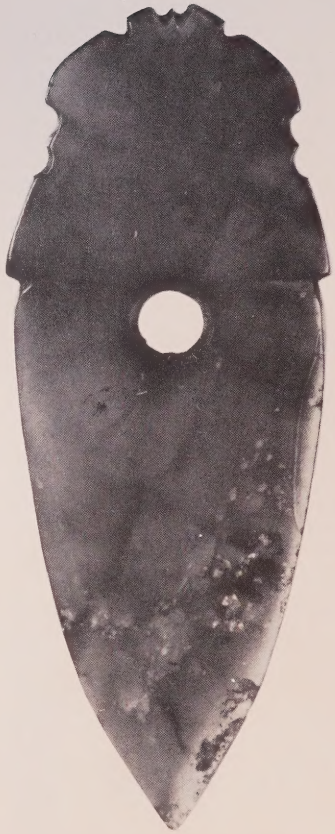
Blue-green jade, semi-translucent, with clouding and white speckling, amber veins and tinges, and a trace of calcification at beak end. Thin piece, slightly upcurved at pointed end, is spearhead-shaped. Outline simply notched above to suggest forelegs, eyes and beak. Polished but plain upper surface divided into four sections by transverse ledge (just above large perforation) and a gentle longitudinal ridge resembling the midrib of a blade; underside plain. Traces earth and red pigment. Reportedly from Anyang. Comparable cicada carved from a perforated small spear-or lancehead is in the J. Eguchi collection, Osaka (cf. Umehara, 1955, Pl. LXXXV: 2 where it is shown in Han company).

Cicada, viewed from underside (918.7.149). L. 2 1/8" (5.4 cm.). Han

Pale greenish-white jade tinged at one side with white and gold. Soft polish and edges. Typical Han tongue-cicada with incised eye, thorax and wing lines on back and the beak-cross and body segments on the convex underside shown.

Cicada (918.7.145). L. 2 3/16" (5.5 cm.). Eastern Han

Translucent white "snow-flecked" jade polished to a high lustre. Stylized details sharply rendered by deep bevel cutting. Eyes stand out from bi-convex plaque as plastic spiral forms. Plain folded wing-tips and bevelled body end are sharply pointed. Head and thorax show superb decorative sylization, while on underside a concern for realism is still evident in the nine delicately-incised body segment lines below the stylized beak motif. Compare white jade cicada excavated from an Eastern Han tomb in Ting Hsien, Hopei Province (WW, '64, 12, Pl. 2: 2-3).



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AA	*Artibus Asiae*
BAS	*Bulletin, Institute of History and Philology,* Academia Sinica, Taipei
JAOS	*Journal of the American Oriental Society*
JWCBRS	*Journal of the West China Border Research Society*
KK	*K'ao-ku (K'ao-ku t'ung-hsün* 1955-8), Peking, 1950–
KKHP	*K'ao-ku hsüeh-pao,* Peking, 1936–
OA	*Oriental Art*
SBTA	*Sekai Bijutsu Taikei* (Series on Art of the World), Kodansha
SBTB	*Sekai Bunkashi Taikei* (Series on World Cultural History) Kadokawa Shoten
SBZ	*Sekai Bijutsu Zenshu* (Series on World Art), Kadokawa Shoten
SKT	*Sekai Kōkogaku Taikei* (Series on World Archaeology), Heibonsha
TOCS	*Transactions of the Oriental Ceramic Society,* London
WW	*Wên Wu (Wên-wu ts'an-k'ao tzü-liao* 1950-8), Peking 1950–

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